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CENSUS OF INDIA, 1921.

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Punjab And Delhi

(2) and United Provinces

PART I.

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AND S. M. JACOB, I. C. S.,

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INTRODUCTION.

1. Previous census reports of the Punjab have dealt in great detail with matters connected with religion, marriage customs, caste structure, languages and other subjects not necessarily directly connected with the statistics which it has been the object of the census to collect. Preface.

In view of the mass of information on these subjects which has been collected in census reports, gazetteers and reports of ethnographic and linguistic survey, it was considered unnecessary to deal with them again in great detail and in their place enquiry has been directed towards the economic and industrial conditions of the two provinces.

The census operations have taken place at a time when Deputy Commissioners and other local officers, already overburdened by the elaboration of their routine duties during the last decade, were concentrating all their energies in guiding the country through a critical period of change. At former censuses such local officers had responded nobly to calls upon them for the provision of masses of facts and information on subjects which were dealt with in the census reports: I have felt that it would be impossible for them to respond to any such call at this time, and have endeavoured to cast as little additional work as possible upon them in connection with the actual census and to refrain from calling upon them to send in reports on subjects of general interest. I find that I have issued only thirty-nine general circulars throughout the operations, and that of these only three asked for general information, the rest being entirely concerned with administrative details of the enumeration and preparation of statistics.

The inevitable result is that this report, following the lines of those prepared for European countries, will be confined in the main to an explanation of the figures which have been tabulated.

I have spared no endeavour to render these as accurate as possible, and where there are any reasons for suspecting inaccuracies I have no hesitation in pointing them out, so that as far as is possible the statistics may form a solid basis on which statisticians may base arguments and test theories. Not being a trained statistician myself I have tried to resist the fascinating temptation of building up theories from the statistics, though I have suggested lines of enquiry that might be taken up by those qualified for such work.

2. The dates of previous censuses are given in the margin, a short account of them will be found in paragraphs 20 to 22. Some of the Tables published in Part II of this report repeat figures for previous censuses back to that of 1881: the two which had been taken before that dealt with such totally different administrative divisions that comparison with them is practically useless; where figures for previous censuses have been reproduced in this report they have been adjusted so as to refer to existing divisions and not to the divisions which were in being at the time they were originally prepared; they are thus already in a form suitable for comparison with the newly recorded statistics. Previous Censuses.

1st January 1855.
10th January 1868.
17th February 1881.
26th February 1891.
1st March 1901.
10th March 1911.

3. Changes in the boundaries of administrative units that have taken place since the census of 1911 are detailed in paragraphs 2 and 3 of this report, the only two important changes are the creation of the Delhi Province from portions of the old Delhi District of the Punjab and the Meerut District of the United Provinces, and the creation of the new district of Sheikhupura from portions of the surrounding districts of Lahore, Gujranwala and Lyallpur. Changes in Boundaries and Areas.

4. A full description of the census operations is published in the Administrative Volume, Part IV, of this report; that volume being intended only for departmental and local use, a very brief note on each stage of the operations is given below. Very little change was made in the procedure gradually evolved and improved at previous censuses. Operations of the Present Census.

5. I took over charge of my duties on the 31st March 1920, and took the organisation in hand immediately. A preliminary circular together with the first three chapters of the Provincial Census Code was issued on the 27th April; District Census Officers in every district and Census Superintendents in every Initial Arrangements.

State were appointed forthwith, and general village and town registers were prepared on which to base the formation of census divisions.

Census
Division and
Agency.

6. The whole countryside was parcelled out into blocks in which the enumeration could be carried out by one enumerator; these blocks were grouped in circles under supervisors, and the circles again grouped in charges under charge superintendents. The existing revenue divisions were very generally followed in fixing the boundaries of charges and circles, and the revenue agency was largely employed as Superintendents and Supervisors. These divisions were first fixed roughly and then revised after the completion of house-numbering showed where mistakes had been made in estimating the suitable boundaries for blocks; ultimately at the time of the final census there were 172,044 blocks, 13,943 circles and 1,017 charges, and the enumeration was carried out by 164,425 enumerators under the direction of 13,913 supervisors and 999 charge superintendents. Most of the supervising staff was recruited from amongst officials, whilst the enumerators were in the main voluntary non-official workers; all were appointed individually under the Census Act and thus all gained the status of public servants.

House-
Numbering.

7. The Census Divisions having been tentatively fixed the next step was the numbering of all houses, this work was commenced on 15th September and completed within two months. Each house which might be occupied on the census night was clearly marked with a number, a separate series of numbers being kept for each circle. This work was carried out by the supervisors. As a result just over eight million houses were numbered, but to ensure that no person should escape enumeration many buildings were numbered which were not inhabited on the census night, and on that night it was found that only a little over five and a half million were inhabited. This numbering formed a reliable basis for the supply of forms, and after it was completed the census divisions were revised and fixed finally.

The Pre-
liminary
Enumeration.

8. In July a complete issue of the Census Code had been published and this was followed in August by a pamphlet of instructions for Charge Superintendents and Supervisors; short instructions for enumerators were printed on the covers of the actual enumeration books.

During the progress of house-numbering the whole staff received training in their duties; starting from the top each census officer instructed the officers immediately subordinate to him so that the instructions drifted down from the Provincial Superintendent to the enumerators. Test enumerations formed the main part of the training.

The preliminary enumeration took place between the 1st February till the 1st March in rural tracts, in towns it was both commenced and finished a fortnight later. At this enumeration all persons likely to be in residence on the 18th March were entered up in the enumeration books; this procedure allowed ample time for the careful recording and checking of all entries and reduced the work at the final census to a minimum. The enumeration book consisted of a cover, containing instructions and forms of summaries to be filled up and detached after the census; a block list, which was a detailed list of the houses in the block and served to prevent any buildings being overlooked either at the preliminary or final enumeration; and a sufficient number of general schedules on which the actual particulars concerning each person were recorded.

The Final
Census.

9. The final census took place between 7 and 12 o'clock on the night of the 18th March, every enumerator visited all the houses in his block and corrected his enumeration book by striking out entries referring to people who were found to have left since the preliminary record had been prepared and by adding entries for all new-comers. This having been completed every entry in the book was given a serial number—the number of occupied houses, persons, males and females was totalled for the block, then for the circle and then for the charge. The charge summaries were totalled for the district or town at district headquarters and then telegraphed to Lahore and Simla.

Use of
Household
Schedules.

10. The general schedule was a tabular statement of lines and columns with a line for each person enumerated and a column for the record of each particular regarding him. In a few places, where Europeans were numerous and it was possible to obtain the services of an English-speaking enumerator, these forms were used in English for the recording of Europeans; but in general Europeans are found in small numbers in blocks containing many Indians and in such cases the enumerator could not be expected to fill up entries concerning them in a

general schedule ; to meet this difficulty Europeans were supplied a few days before the census with an English form termed a " household schedule " on which to fill in for themselves the entries regarding themselves and other members of their households. In spite of very detailed instructions for filling them up, these household schedules were often carelessly completed and their collection and correction was accompanied by much difficulty.

11. A few outlying portions of the Province are cut off by snow-covered passes which render them completely inaccessible in March ; in these a census was held in the autumn of 1920 and the results of it treated as part of the March

Non-Syn-
chronous
Census
in
Inaccessible
Tracts.

<i>Rangra District—</i>	
Kothis Kodh and Sogar ..	20-9-20
Lahul and Spiti	29-8-20
<i>Chamba State—</i>	
Pangi and Lahul	15-9-20
<i>Dashahr State</i>	
Chini and Dodra Kuar ..	15-12-20

Census. The dates of such non-synchronous censuses are given in the margin. In addition to these there were other tracts where the preliminary enumeration had to be held in the autumn of 1920, though it was found possible to hold the final census at the normal time. In yet

other tracts the presence of wild beasts rendered night-work unsafe, and the final census was held at daybreak on the 19th March instead of the previous night.

12. Special arrangements were made to enumerate the persons travelling on the census night and as each was enumerated he was provided with a pass which prevented his being enumerated a second time ; the work of this sort of the greatest magnitude was the census on the railways. All railway stations were made into separate blocks or circles in the district in which situated, a special enumerating staff was posted to each at 7 p.m. on the night of the 18th March and remained on duty till 6 a.m. next morning or until the last train had passed through and the station was closed for the night ; this staff enumerated everyone found on the station at 7 p.m. and thereafter enumerated everyone arriving at the station either by road or rail who could not produce a pass showing that he had already been enumerated. In this way everyone entering or leaving a train during the night was accounted for ; there remained a few people on trains running long distances who had entrained before the station enumeration started and had not left the train next morning ; to ensure that these people were also counted it was arranged that all trains running throughout the night should carry an enumeration staff ; this staff spent the night enumerating the passengers and at 6 a.m. all such trains were stopped and a final enumeration carried out of all those who had not got passes.

Arrange-
ments for
Railways,
Fairs and
Migratory
Population.

The District census authorities were responsible for the station enumeration which was however usually carried out through the agency of the station staff ; the running train enumeration was conducted entirely by the railway authorities themselves.

The instructions issued provided for all contingencies, and it is unlikely that more than a very few railway travellers escaped enumeration ; the above description only indicates the broad lines on which arrangements were made. Enumerating staffs were appointed to 762 stations in the two provinces and 69 running trains.

Especial arrangements for fairs and other large concourses of people were put in train beforehand and were necessitated in thirty places.

All main roads were patrolled by enumerators, staffs were posted to ferries, especial arrangements for troops on the march were made with officers in charge of such units. There remained such persons as were temporarily absent from their houses, guarding their fields or doing other casual work in the immediate vicinity ; the orders contemplated that these should be recorded as though present in their houses, and it is probable that very few escaped enumeration.

13. As explained in paragraph 9, the totals for each district, State and town were added up as soon as possible after the census ; these totals included all persons whether enumerated at their houses or whilst travelling ; their collection from outlying tracts was one of considerable difficulty and motor-cars, horse-men, camel-riders, and runners were employed in bringing them in.

Provisional
Totals.

The Kapurthala, Pataudi and Nabha States were all able to telegraph their provisional totals on the 19th March ; in British Territory the Delhi Province was the first unit to report its totals which it did on the 20th ; the great majority of totals had been got in by the evening of the 22nd March but the last district, in which work had been delayed owing to a mistake in a cantonment, was not able to wire its total till the 27th. The figures as reported by telegram

are compared with those finally tabulated below, and show a high standard of accuracy for so hurried an operation.

			Occupied houses.	Persons.	Males.	Females.
PUNJAB.						
Provisional Total	..	..	5,523,073	25,083,704	13,726,148	11,367,648
Final Totals	..	..	5,532,305	25,101,060	13,732,048	11,369,012
DELHI.						
Provisional Totals	..	..	112,635	486,741	280,709	206,032
Final Totals	..	..	114,683	488,188	281,633	206,555

Slip copy-
ing.

14. The next stage in the operations was to copy the entries concerning each person enumerated on to a separate slip. These slips were issued in five different colours, one for each of the main religions and one for all other religions; a distinctive symbol was printed on each to distinguish between males and females, and between unmarried, married and widowed persons; there were thus five different colours and six different symbols giving a total of thirty easily distinguished slips; in addition special slips were issued for the recording of infirmities; the other particulars recorded about each person were recorded by hand on the slips, a previously arranged system of abbreviations being adopted.

This work was done as in 1911 by the supervisors who were collected at tahsil headquarters for the work immediately after the census; as the period available was very short owing to the majority of supervisors being patwaris who were required in their circles for crop-inspection, an option was given to local authorities to have slips prepared from the preliminary record before the final census. The intention of this option was that slips should be prepared according to the provisional entries in the enumeration books so that the only copying work to be done after the census would be to destroy slips for cancelled entries and prepare new ones for the entries made on the actual census night. 21 districts and 10 states adopted the option and prepared slips beforehand. In only a few of these was the experiment justified by the result; slip-copying after the census was carried on by a staff collected together and constantly under supervision, that done before the census was done by supervisors in their circles and was only the subject of supervision by charge superintendents when they visited the circles; it was very generally found that the slips prepared before the census had to be corrected or prepared afresh after the census and the experiment did not result in the saving of time and led to a considerable additional wastage of slips. Although very careful estimates of the numbers of slips required in each tahsil had been made beforehand and a supply sent allowing a liberal excess for wastage, yet in many centres slips of particular varieties ran short and a break-down in printing arrangements occurring at the critical time much delay resulted; in many districts it was found impossible to complete the copying before letting the patwaris return to their urgent revenue duties and in such districts the copying had to be finished after the crop-inspection was over. It was hoped to complete the slip-copying by the 27th March and this could have been done in most centres had not the supply of slips broken down; actually the slips came in very slowly and a considerable number of units had not sent in slips by the middle of May whilst the last to be received arrived at the beginning of July.

Sorting.

15. Central sorting offices were opened at Karnal, Ludhiana, Lahore and Lyallpur; and the completed slips were sent to these offices where large staffs sorted them according to the various heads required for each table of the report.

The maximum staff employed and the dates of commencing and completing

Office.	STAFF.			Commence- ment.	Completion.
	Inspe- ctors.	Supervi- sors.	Sorters.		
Karnal	..	3	18	7th April 1921.	21st August 1921.
Ludhiana	..	4	23	1st April 1921.	22nd August 1921.
Lahore	..	5	22	1st April 1921.	18th July 1921.
Lyallpur	..	4	22	6th April 1921.	17th July 1921.

the work in each of these offices is shown in the margin. The Phulkian States, Patiala, Jind and Nabha, carried out their own sorting and tabulation, but with this exception

all the sorting was carried out at the four central sorting offices.

16. The results of the sorting were set forth on sorters' tickets which were sent to the compilation office in Lahore where they were compiled into District or other units totals, and then finally arranged in the form in which they appear in the Tables Volume of this report. This office was in charge of my Personal Assistant who had a large staff of Inspectors and Compilers working under him. The office opened on 1st May 1921, the first table was sent to the press on 17th September 1921 and the last table was finally printed off on 17th January 1923. The process of tabulation is a long and complicated one, any errors in the previous operations, which have escaped detection, come to light at this stage when their correction involves long and careful investigation which is extremely difficult to carry out.

17. The results of the census are published in four parts, the months in which these were issued or in which it is expected that they will issue are as follows:—

Part I. The Report	.. .. .	during June 1923.
Part II. The Imperial Tables	.. .. .	May 1923.
Part III. Appendices to the Imperial Tables	.. .. .	May 1923.
Part IV. The Administrative Volume	.. .. .	June 1923.

Publication.

18. The census of the two provinces has cost Government Rs. 3,59,224 which works out at Rs. 14-0-8 for every 1,000 persons enumerated; this compares with Rs. 1,23,907 or Rs. 5-1-11 per 1,000 in 1911. In addition to this sum of Rs. 3,59,224, the total cost of the census includes Rs. 23,112-1-3 recovered from Municipalities on account of cost of tabulation, Rs. 11,550-7-7 recovered from Indian States on account of the cost of forms, sorting and compilation; whilst Indian States have reported a cost of Rs. 50,977-12-10 for the enumeration that they themselves carried out. The Phulkian States have been omitted altogether in reckoning these figures as they carried out the whole of the operations themselves.

Cost of the Census.

19. First and foremost a very grateful acknowledgment is due to the official and non-official census staff that carried out the enumeration and slip-copying. With few exceptions this enormous body of workers gave its services freely and without expectation of payment of reward; the non-officials were honorary volunteer workers, whilst the officials undertook the heavy extra duties without additional payment. All are deserving of the sincerest thanks and of congratulations on the public spirit they exhibited. especial praise is due to the patwari staff. Patwaris are hard-worked officials and many miscellaneous duties beyond those directly connected with the revenue administration fall to their lot; they undertook the severe strain of census duty with very little grumbling and carried it through as efficiently as they were able to do; in addition to forming the backbone of the enumeration staff they carried through the slip-copying, which is a monotonous and uninteresting work which has to be carried through at high pressure. Some small acknowledgment of the services of the enumerating staff has been made by the presentation of *sanads* (certificates) for good work, these were issued in three classes, and the numbers issued were 1st Class 242, 2nd Class 1,218 and 3rd Class 7,641; in addition at the close of the financial year 1921-22 I devoted all funds available for the purpose towards giving rewards for slip-copying, but I only had Rs. 16,000 available and only Rs. 15,047 were actually distributed, which only allowed small rewards being given to the best of the men.

Acknowledgments.

Deputy Commissioners and District Census Officers, throughout the provinces, directed the operations in their respective districts; their work has increased during the last decade and it could not be expected that they would find much time available for personal superintendence, but so far as their time permitted they all contributed to the success of the operations; amongst Deputy Commissioners I would especially wish to mention Mr. Harcourt in Gurdaspur and Mr. Gordon Walker in Rohtak who took much personal interest in the work in their districts. The work of Mr. Lane Roberts, who was in charge in the Delhi Municipality, and of Mr. Blacker, who conducted operations in the trans-frontier tract of Dera Ghazi Khan, deserves particular notice; both these officers had exceptional difficulties which they surmounted with enthusiasm.

The darbars of the Punjab States appointed Census Superintendents to take charge of census operations, in many cases these officers were able to devote their whole time to the census, and all had more time to give to it than the busy

officials who had to undertake the work in British districts without any diminution in their other duties. Amongst a group of very capable and helpful officials I would single out Sardar Bachittar Singh in Patiala, Syed Abdul Majid in Kapurthala and Syed Altaf Hussain in Jind, but with one exception the work of all was so good that I feel considerable diffidence in specially mentioning any by name.

Five Extra Assistant Commissioners worked under me in the Census Department; Lala Arjan Das worked as my Personal Assistant between 21st January 1921 and 31st August 1921 and was succeeded by Sheikh Abdul Majid who had already been in charge of the Lahore Sorting Office. The Personal Assistant was in general charge of the tabulation work; and both incumbents of the office worked well, Lala Arjan Das giving me material assistance in the preliminary stages and Sheikh Abdul Majid preparing and checking the tables; the whole work was new to Sheikh Abdul Majid, but he organised both the sorting and tabulating work on sound lines and justified his selection. The other three sorting offices were also under men new to the work; they were Syed Abdul Haq at Ludhiana, Lala Bishamber Dayal Singh at Karnal, and Malik Chiragh-ud-din at Lyallpur; the newness of the work led to several mistakes being made which caused much trouble to rectify but on the whole the work was satisfactory, that of S. Abdul Haq being rather more dependable than that of the others.

Change of
Superin-
tendent.

20. Owing to ill-health I was obliged to take leave from the 21st September 1922; previous to that date ill-health had delayed my work, and on relinquishing my charge I had only written so much of the Introduction to the Report which precedes this paragraph and Chapter I, but Parts II and III of the Report had been completed and were with the Press. I relinquish charge without information as to the identity of my successor who will write the major portion of the Report and complete this introduction.

L. MIDDLETON.

20-9-22.

INTRODUCTORY NOTE CONTINUED.

21. I took over as Superintendent, Census Operations, on the 3rd October 1922, Sheikh Abdul Majid, B.A., LL. B., having remained in charge of the Office after Mr. Middleton's departure. As he has noted Mr. Middleton had completed Chapter I of the Report, and this chapter alone contains a comprehensive survey of nearly all the subjects dealt with in the census. Mr. Middleton also took to England and completed there the whole of the Administrative Volume, Part IV.

22. My own task has been to see a great portion of Parts II, III and IV through the press and to write the eleven remaining chapters of Part I. Two months were spent in gaining familiarity with all the phases of census work, and in the remaining five months the chapters have been written rather faster than at the rate of one a fortnight, so as to complete the report by the end of April. Under these circumstances I have had strictly to limit the time devoted to the investigation of those fundamental principles without which it is impossible to understand the problems of migration, birth and death-rates, and age-distribution.

23. Throughout the chapters for which I am responsible I have sought, wherever possible, to express results in a precise statistical form with due regard to the probable errors of enumeration. Neglect of this consideration has led to the formulation of many utterly unproven and even demonstrably false propositions. Every census report in fact bristles with dogmatic statements and I should hesitate to estimate how many are contained in the chapters written by myself. I am fully aware that that to make much unqualified statements is contrary to the spirit of scientific progress, and would ask the reader to believe that the limitations to which most of the statements are subject were in many cases present to my mind even when they are not explicitly set forth.

Nothing, in fact, is more conducive to dogmatic statement than the masses of statistics contained in a census report, yet no where is dogmatic statement less justified or the critical spirit of present-day statistical doctrine more necessary. Indeed modern statistical methods probably indicate more often what conclusions are false than what conclusions are true and even this seemingly negative result may be reached only after patient and abstruse enquiries.

24. In addition to the gentlemen whose services have been acknowledged by Mr. Middleton, I wish to express my thanks to those who have specially assisted me, in particular, to Colonel W. H. C. Forster, I.M.S., Director of Public Health, Punjab, whose constant advice and criticism has been of the utmost value in all matters relating to vital statistics and deaths from disease; to Mr. G. Anderson, C.I.E., I.E.S., Director of Public Instruction, who kindly devoted many hours together with several departmental officers to the discussion of the problem of education and its bearing on the general literacy of the province; to Colonel Ward, I.M.S., Inspector-General of Prisons, who furnished me with some special jail mortality statistics; to Mr. Calvert, I.C.S., Registrar, Co-operative Credit Societies, whose unrivalled knowledge of the industrial and rural economics of the Punjab has been freely placed at my disposal in the form of notes on my draft chapter on occupation; to Mr. R. Sanderson, M. A., I. E. S., Inspector of Schools, Lahore Division, who has kindly supplied me with certain data regarding Albinos; to Mr. H. L. O. Garrett, M.A., I.E.S., for a note on recruitment in the Ludhiana district; to Rai Bahadur Sir Ganga Ram, Kt., C.I.E., C.V.O., for information regarding the Vidhya Vivah Sahaik Sabha, Lahore; to Mr. Faqir Chand, Auditor of Statistics, North-Western Railway, for information supplied regarding the number of passengers and density of traffic on the North-Western Railway; to Mr. Labha Mall, Assistant Librarian of the Punjab University Library, for bringing to my notice several interesting books on population statistics; to the authorities of the "Civil and Military Gazette" Press, and in particular, to Mr. Gilbert, whose unfailing courtesy and energy has smoothed the task of getting so much material into print; to Mr. K. C. Vidyarthi, Manager of the Bharat Insurance Company, for his kind treatment of the Census Department which rented offices in the Bharat Buildings. Finally, I must acknowledge the great services rendered by my Personal Assistant, Sheikh Abdul Majid, B.A., LL.B., but for whom the task of completing the report within the short time allotted would have been well-nigh impossible. The Chapters IV and IX on religion and language are almost entirely his own, and I did little more than edit them. Both my computers, Mr. Abdul Majid, M.A., and Mr. Balwant Singh, B.Sc., gave great assistance in many laborious computations and both of them put up many valuable notes. Good work was done by all members of the staff of whom Mr. Barkat Ali, Head Clerk; Sheikh Mohammad Abdul Wahid, Recordkeeper; Inspectors Ata-ur-Rahman and Fazal Din, and my Stenographer Bawa Jagat Singh may be specially mentioned.

S. M. JACOB;

REPORT OF THE CENSUS OF THE PUNJAB AND DELHI, 1921. *and U.P.*

CHAPTER I.

Distribution and Movement of the Population.

SECTION I.—DESCRIPTIVE.

1. Geographical position and boundaries of the provinces. 2. External changes in boundaries since 1911. 3. Internal changes. 4. Administrative divisions. 5. Natural divisions. 6. Land tenure. 7. Cultivation. 8. Irrigation. 9. Communications. 10. Rural economy. 11. Industrial and economic.

SECTION II.—AREA, POPULATION AND DENSITY.

12. Actual, resident, normal and natural population and the population recorded at the census. 13. Reference to statistical tables. 14. Area and population. 15. Population of administrative divisions. 16. Density. 17. Density in districts and states. 18. Density of rural population and its relation to agricultural conditions.

SECTION III.—VARIATION IN POPULATION AT PREVIOUS CENSUSES.

19. History. 20. Past censuses. 21. Fluctuations in population, 1855—1901. 22. Variation in the decade 1901-11.

SECTION IV.—THE CONDITIONS OF THE DECADE 1911-21.

23. General. 24. The war. 25. Relation between vital statistics and census results. 26. Public health. 27. The influenza epidemic of 1918. 28. Connection between canal irrigation and mortality from fever. 29. Agricultural conditions of the decade. 30. Extension of cultivation. 31. Prices, wages and agricultural debt. 32. Co-operative credit societies. 33. Joint-stock companies. 34. Trade. 35. Industrial development. 36. Communications.

SECTION V.—MOVEMENT OF THE POPULATION 1911-21.

37. Total variations in the Punjab and Delhi. 38. Variations in districts and pressure on resources. 39. Effect of disease on variations in districts. 40. Effect of migration on variation in districts. 41. Summary of causes affecting variations in district. 42. Variations in density. 43. Future variations.

SECTION VI.—HOUSES AND FAMILIES.

44. Description of Punjab houses. 45. Definition of "house" for census purposes. 46. Number of houses. 47. Number of residents in a house. 48. The family.

Section I—Descriptive.

1. The Punjab lies in the north-west of India and is a region of vast plains at the foot of the Himalaya mountains which run along its northern border; the small province of Delhi forms an entrant into the southern portion of its eastern boundary and until recently formed a portion of the larger province. The Punjab lies roughly between the Jumna River on the east and the Indus River on the west and takes its name, which means the "Five Waters," from five rivers which traverse it from north-east to south-west and unite to pour their waters into the Indus towards the extreme south-west corner of the province. These seven rivers are the most important physical features of the country and have been determining factors in her history and in forming her external and internal administrative boundaries. The Sutlej enters in the north-east and runs in a west-south-westerly direction to join the Indus at Mithankot in the south-west and thus traverses the extreme length of the province: this river and the Jumna are close together where they issue from the hills, but the latter then flows south and follows the whole eastern border of the province before turning east through the United Provinces to join the Ganges; the watershed between them gradually widens until it merges into the plains of Rajputana with their own separate system of rivers. This watershed forms the south-eastern part of the province which adjoins the Rajputana States on the south-west, the boundary with these States being an arbitrary and irregular line not based on any particular physical feature. This south-eastern part of the province forms the Cis-Sutlej tract of early Anglo-Indian nomenclature and was the first part to be occupied by the British. The remainder of the province, the Trans-Sutlej region, forms a

Geographical position and boundaries of the Provinces.

vast triangle bounded by the Himalayas, the Sutlej and the Indus ; this triangle is divided into five smaller triangles by the other four rivers, each triangle being known as a "Doab" or land of two waters ; the present districts of the province are in general sub-divisions of these doabs and rarely lie on both sides of a river. The Dera Ghazi Khan District on the right bank of the Indus and the Bahawalpur State on the left bank of the Sutlej, which do not fall into the description given above, form outlying portions of the Punjab which are in many ways distinct from it.

* In the north-east the Punjab runs with Tibet for a short distance, on the east it adjoins the United Provinces, to the south lie the States of Bikanir and Jaisalmer and the Sind tract of the Bombay Presidency ; Baluchistan and the North-West Frontier Province lie across its western boundary, whilst Kashmir State lies to the north.

External
changes in
boundaries
since 1911.

2. Apart from a few unimportant transfers due to riverain action between the United Provinces and the Karnal and Gurgaon Districts of the Punjab there has been only one change since the last census, but that a most important one, in the boundaries of the Province. At that time the Delhi District was part of the Punjab, but in 1911 it was decided to move the Imperial Capital to Delhi and the district was remodelled and placed under a separate local government as a separate province in the following year. The present province of Delhi bears little relation to the old Punjab district of that name ; that district consisted of three tahsils—Delhi, Sonapat and Ballabgarh ; at the time of separation the tahsil of Sonapat with an area of 448 square miles was transferred bodily to the Rohtak District, whilst an area of 280 square miles from Ballabgarh Tahsil was transferred to the Gurgaon District. The major portion of the old district therefore remained in the Punjab and only the Delhi Tahsil and a small portion of the Ballabgarh tahsil went to the new province ; later on the Delhi Province was enlarged by the addition of some 46 square miles from the Meerut district of the United Provinces, and was thus brought to its present size of 593 square miles.

This being so care must be taken never to compare any statistics compiled for the Delhi Province with those of the old Delhi District ; in the Imperial Tables wherever previous census figures are given for Delhi they have been carefully corrected so as to refer to the area which now forms the province and therefore form a basis for comparison. It was not found possible to make similar adjustments in the majority of figures in the Subsidiary Tables and miscellaneous statements given in this report ; in these, where comparison with previous figures is required, they must be made between them and the combined figures for the Punjab and Delhi in 1921. In order to provide a basis for comparison in future the 1921 figures have been shown both in the combined form and separately for each province.

Internal
changes.

3. Numerous trifling adjustments of boundaries of internal divisions have taken place since 1911 ; a complete list of these is given at the end of this paragraph and it will be seen that twenty-four affect district boundaries and that twenty-five more affect the boundaries of tahsils but not of districts. Necessary adjustments in figures for area and population at past censuses have been made wherever these appear in this report, so that the figures now published refer to the internal divisions as existing after all these transfers had been effected. At the time of the census the Sheikhupura District was in the course of formation, it was created in 1919 from parts of the Lahore and Gujranwala Districts, some subsidiary transfers from Sialkot to Gujranwala taking place at the same time. It was intended to add to it on the 1st April 1921 by the addition of 159 villages from Jaranwala and this date being so close to the census I was directed to treat it as though it had already been effected. The proposed transfer was much delayed and on the 1st April 1922 a general reconstitution of the new district took place ; the major portion of the Raya Tahsil of Sialkot was added to Sharakpur, the remainder being merged in the Zafarwal Tahsil ; the previously proposed transfer took place at the same time and the enlarged Sharakpur Tahsil was split into two new tahsils of Nankana Sahib and Shahdara. By this time it was too late to amend the census statistics, either by including all the changes which occurred on 1st April 1922 or by omitting that which had been prematurely recognised, the result is that the figures in this report do not deal with the Lyallpur and Sheikhupura Districts exactly as they stood at the time of the census.

The transfers connected with the formation of the Sheikhpura District were the most important, which occurred in the decade; others affecting considerable areas were those from the Bhera Tahsil of Shahpur to the Phalia Tahsil of Gujrat in 1911, and from the Okara Tahsil of Montgomery to the Samundri Tahsil of Lyallpur in 1912.

Of the twenty-five changes which occurred between tahsils within the same district, and thus did not affect district boundaries, the most important are those in connection with the creation of two new tahsils,—Jaranwala in the Lyallpur District and Khanewal in the Multan District; whilst a third of some magnitude was the transfer of thirty-seven villages from the Moga to the Ferozepore Tahsil in the Ferozepore District.

The Bhera Tahsil of Shahpur District and the Gugera Tahsil of the Montgomery District have gone through a process of remodelling during the decade and have had their names changed to Bhalwal and Okara respectively.

Some of the Punjab States have altered the boundaries of their internal administrative divisions. In Patiala State the four tahsils of Payal, Ghanaur, Banur and Mohindargarh have been absorbed in the tahsils of Sirhind and Dhuri, Patiala, Rajpura and Narnaul respectively, whilst the old tahsils of Pinjaur and Bhiki have been named Kandaghat and Mansa. In Nabha State the old tahsil of Phul has been split up into three new tahsils, Phul, Jaitu and Dhanaula, whilst part of the old tahsil of Amloh has been constituted a separate tahsil under the name of Nabha.

All the changes to which reference has been made in this and the preceding paragraph are noted in the following statement:—

District.	Tahsil.	District.	Tahsil.	Area in square miles.	Number of Notification.	Date.
From which transferred		To which transferred.				
A.—AFFECTING PROVINCIAL BOUNDARIES.						
1. Delhi ..	Sonepat ..	Rohtak ..	Sonepat ..	448	2922-S. ..	1-10-12
2. Delhi ..	Ballabgarh ..	Gurgaon ..	Ballabgarh ..	280	2944-S. ..	1-10-12
3. Meerut, U. P. ..	Ghaziabad ..	Delhi ..	Delhi ..	46	984-C. ..	22-1-15
4. Delhi ..	Ballabgarh ..	Delhi ..	Delhi ..	101	984-C. ..	22-1-15
5. Dhankor, U. P. ..	..	Gurgaon ..	Ballabgarh ..	7	River action.	
6. Muzaffarnagar and Saharanpur, U. P. ..	..	Karnal ..	Karnal ..	28	River action.	
7. Muzaffarnagar, U. P. ..	..	Karnal ..	Panipat ..	2	River action.	
8. Karnal ..	Karnal ..	Muzaffarnagar and Saharanpur, U. P. ..	..	8	River action.	
9. Karnal ..	Panipat ..	Muzaffarnagar and Saharanpur, U. P. ..	..	2	River action.	
B.—AFFECTING DISTRICT BOUNDARIES.						
10. Lahore ..	Chunian ..	Sheikhpura ..	Sharakpur ..	58	23035 ..	30-10-19
11. Lahore ..	Lahore ..	Sheikhpura ..	Sharakpur ..	84	23035 ..	30-10-19
12. Gujranwala ..	Khangah Dogran. ..	Sheikhpura ..	Khangah Dogran. ..	880	23036 ..	30-10-19
13. Gujranwala ..	Sharakpur ..	Sheikhpura ..	Sharakpur ..	891	23037 ..	30-10-19
14. Lyallpur ..	Jaranwala ..	Sheikhpura ..	Sharakpur ..	104	10427 ..	27-3-22
15. Sialkot ..	Pasrur ..	Gujranwala ..	Gujranwala ..	105	23035 ..	30-10-19
16. Sialkot ..	Daska ..	Gujranwala ..	Gujranwala ..	74	23035 ..	30-10-19
17. Simla ..	Simla ..	Ambala ..	Kharar ..	3	148-Police ..	29-3-16
18. Sialkot ..	Raya ..	Amritsar ..	Ajnala ..	2	504 ..	30-7-15
19. Amritsar ..	Ajnala ..	Sialkot ..	Raya ..	1	505 ..	30-7-15
20. Shahpur ..	Bhera ..	Gujrat ..	Phalia ..	306	224 ..	27-3-11
21. Shahpur ..	Bhera ..	Gujrat ..	Phalia ..	6	197 ..	10-2-14
22. Shahpur ..	Bhera ..	Gujrat ..	Phalia ..	2	3419 ..	13-2-18
23. Montgomery ..	Gugera ..	Lahore ..	Chunian ..	6	660 ..	15-7-12
24. Montgomery ..	Gugera ..	Lahore ..	Chunian ..	3	224 ..	11-3-13
25. Montgomery ..	Montgomery ..	Lyallpur ..	Samundri ..	3	223 ..	11-3-13
26. Montgomery ..	Okara ..	Lyallpur ..	Lyallpur ..	177	222 ..	11-3-13
27. Montgomery ..	Okara ..	Lyallpur ..	Samundri ..	4	123 ..	13-1-12
28. Lyallpur ..	Samundri ..	Montgomery ..	Montgomery ..	3	450 ..	24-7-11
29. Lyallpur ..	Toba Tek Singh. ..	Montgomery ..	Montgomery ..	1	208 ..	26-3-15
30. Multan. ..	Mailai ..	Montgomery ..	Montgomery ..	95	453½ ..	30-6-15
31. Multan ..	Kabirwala ..	Montgomery ..	Montgomery ..	33	453½ ..	30-6-15
32. Lyallpur ..	Toba Tek Singh. ..	Jhang ..	Shorkot ..	89	578 ..	3-9-13
33. Lyallpur ..	Toba Tek Singh. ..	Jhang. ..	Shorkot ..	0	10844 ..	8-4-17

District.	Tahsil.	District.	Tahsil.	Area in square miles.	Number of Notification.	Date.
From which transferred.		To which transferred.				
C.—AFFECTING TAHSIL BOUNDARIES ONLY.						
34. Ferozepore ..	Moga ..	Ferozepore ..	Ferozepore ..	182	..	..
35. Ferozepore ..	Ferozepore ..	Ferozepore ..	Zira ..	1	..	..
36. Shahpur ..	Shahpur ..	Shahpur ..	Bhalwal ..	3	681	22-7-12
37. Shahpur ..	Shahpur ..	Shahpur ..	Khushab ..	1	707	30-7-12
38. Shahpur ..	Bhalwal ..	Shahpur ..	Sargodha ..	15	8-124	16-2-11
39. Shahpur ..	Bhalwal ..	Shahpur ..	Sargodha ..	4	532	27-5-12
40. Shahpur ..	Bhalwal ..	Shahpur ..	Sargodha ..	4	4423	26-2-18
41. Montgomery ..	Montgomery ..	Montgomery ..	Okara ..	35	453	30-6-15
42. Lyallpur ..	Samundri ..	Lyallpur ..	Lyallpur ..	47	576	3-9-13
43. Lyallpur ..	Samundri ..	Lyallpur ..	Jaranwala ..	151	577	3-9-13
44. Lyallpur ..	Lyallpur ..	Lyallpur ..	Jaranwala ..	525	577	3-9-13
45. Lyallpur ..	Samundri ..	Lyallpur ..	Toba Tek Singh.	40	576	3-9-13
46. Multan ..	Multan ..	Multan ..	Khanewal ..	243	6966	25-3-18
47. Multan ..	Lodhran ..	Multan ..	Khanewal ..	2	6966	25-3-18
48. Multan ..	Mailsi ..	Multan ..	Khanewal ..	138	6966	25-3-18
49. Multan ..	Kabirwala ..	Multan ..	Khanewal ..	509	6966	25-3-18
50. D. G. Khan ..	Jampur ..	D. G. Khan ..	D. G. Khan ..	2	26880	1-12-19
51. Patiala ..	Banur ..	Patiala ..	Rajpura ..	162	Ijlas Khas ..	25 Chet 1975
52. Patiala ..	Ghanaur ..	Patiala ..	Patiala ..	185	" Order	"
53. Patiala ..	Mohindargarh ..	Patiala ..	Narnaul ..	299	"	"
54. Patiala ..	Payal ..	Patiala ..	Sirhind ..	123	"	"
55. Patiala ..	Payal ..	Patiala ..	Dhuri ..	152	"	"
56. Nabha ..	Phul ..	Nabha ..	Jaitu ..	64	..	..
57. Nabha ..	Phul ..	Nabha ..	Dhanaula ..	180	..	..
58. Nabha ..	Amloh ..	Nabha ..	Nabha ..	123	..	..

Administrative Divisions

4. At the time the last Census Report was written the Punjab was divided into twenty-nine districts, each administered by a Deputy Commissioner, and these were grouped in five divisions, each in charge of a Commissioner. The separation of Delhi and the creation of the Sheikhupura District leave the number of districts unaltered; the composition of divisions is however slightly altered as the old Delhi Division, now known as the Ambala Division, has lost one district; whilst the Lahore Division, though scarcely altered in area, now includes six instead of five districts. These administrative divisions of the British Territory in the Punjab are shown below in the order in which they appear in the tables of this report and in all official documents:—

Ambala Division.	Jullundur Division.	Lahore Division.	Rawalpindi Division.	Multan Division.
1. Hissar.	7. Kangra.	12. Lahore.	18. Gujrat.	24. Montgomery.
2. Rohtak.	8. Hoshiarpur.	13. Amritsar.	19. Shahpur.	25. Lyallpur.
3. Gurgaon.	9. Jullundur.	14. Gurdaspur.	20. Jhelum.	26. Jhang.
4. Karnal.	10. Ludhiana.	15. Sialkot.	21. Rawalpindi.	27. Multan.
5. Ambala.	11. Ferozepore.	16. Gujranwala.	22. Attock.	28. Muzaffargarh.
6. Simla.		17. Sheikhupura.	23. Mianwali.	29. D. G. Khan.

The Indian States which are dealt with in this report were at the time of the census all in direct political relationship with the Punjab Government, but since then thirteen of them have been placed in direct connection with the Government of India and an Agent to the Governor-General has been appointed who is not responsible to the Punjab Government. In the tables of the 1911 Census Report the forty-three States concerned were arranged in geographical order with reference to their proximity to administrative divisions; of these twenty-eight were grouped together as the Simla Hill States. Owing to the change in political relationship these States have been re-arranged in the tables of the present report as follows:—

A.—Having Political Relations with the Punjab Government.

1. Dujana.
2. Pataudi.
3. Kalala.
4. Simla Hill States.
(27 States).

B. Having Political Relations with the Government of India.

- | | |
|-----------------|-----------------|
| 5. Loharu. | 12. Faridkot. |
| 6. Nahan. | 13. Chamba. |
| 7. Bilaspur. | 14. Patiala. |
| 8. Mandi. | 15. Jind. |
| 9. Suket. | 16. Nabha. |
| 10. Kapurthala. | 17. Bahawalpur. |
| 11. Malerkotla. | |

It should be noted that the arrangement depends firstly on the closeness of their relations with the province, and secondly, on the geographical position they occupy; considerations of seniority, size or importance have not entered into the arrangement.

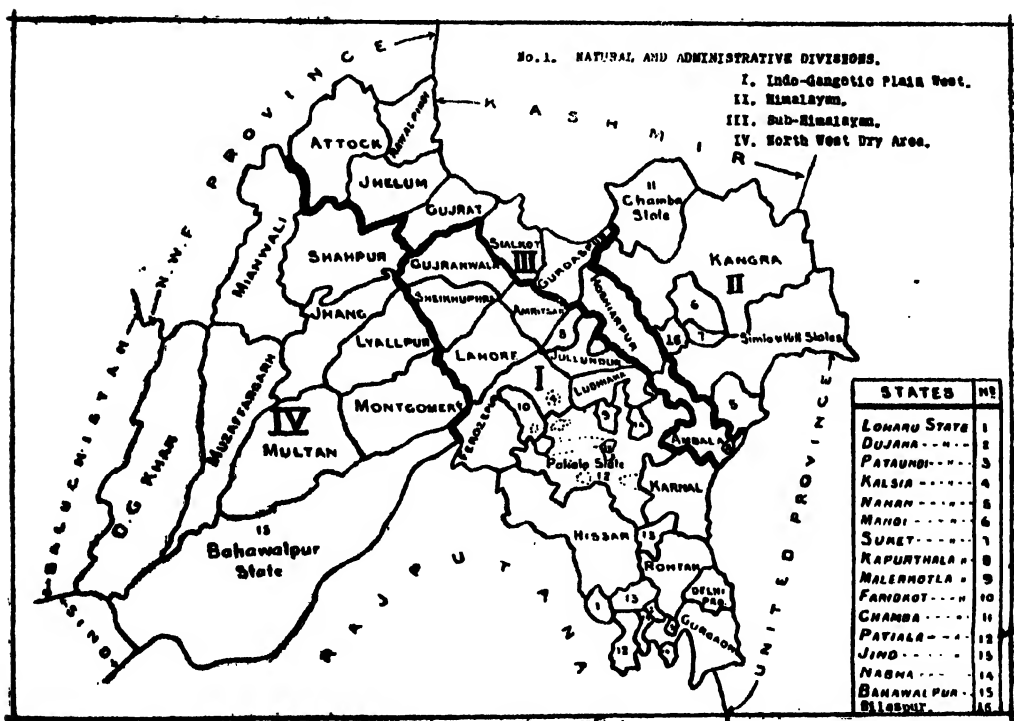
Total figures for all forty-three States have been shown for comparison with previous Census Reports, and separate totals have been shown for the two groups of States to permit of comparison should a separate report be prepared for States in the Punjab Agency at future censuses.

To avoid a very possible source of error in making comparative researches it must be remembered that the term "Simla Hill States" in all Census Reports previous to this has included twenty-eight States whilst it now only includes twenty-seven; this change is due to the fact that Bilaspur State, which previously looked to the Superintendent of the Simla Hill States as its Political Officer, now deals with the Agent to the Governor-General and can no longer be included in the term.

The Delhi Province, consisting of one district of a single tahsil, has no administrative divisions.

5. For many comparative statistical purposes the division of the country by administrative divisions is unsuitable, and India has been divided up into natural divisions distinguished mainly by their physical features, climate and rainfall. Four of these cover the Punjab and are known as the Indo-Gangetic Plain West, the Himalayan, the Sub-Himalayan and the North-West Dry Area. The whole of the Delhi Province lies in the first of these. It will be noted that the names given to these divisions were chosen with reference to India as a whole, and that the North-West Dry Area does not lie in the north-west of the Punjab.

Natural Divisions.



The Districts and States which lie in each of these natural divisions are

I.—Indo-Gangetic Plain West.

1. Hissar.
2. Loharu State.
3. Rohtak.
4. Dujana State.
5. Gurgaon.
6. Patand State.
7. Karnal.
8. Jullundur.
9. Kapurthala State.
10. Ludhiana.
11. Malerkotla State.
12. Ferozepore.
13. Faridkot State.
14. Patiala State.
15. Jind State.
16. Nabha State.
17. Lahore.
18. Amritsar.
19. Gujranwala.
20. Shikot.

II.—Himalayan.

21. Nahan State.
22. Simla.
23. Simla Hill States.
24. Bilaspur State.
25. Kangra.
26. Mandi State.
27. Suket State.
28. Chamba State.

III.—Sub-Himalayan.

29. Ambala.
30. Kalsia State.
31. Hoshiarpur.
32. Gurjaspur.
33. Shikot.
34. Gujrat.
35. Jhelum.
36. Rawalpindi.
37. Attock.

noted in the margin; no change beyond the separation of Delhi has been made since the last census and statistics for the natural divisions are comparable with those recorded then without adjustment.

The second and third of these divisions are very well marked, but it is difficult to fix a satisfactory boundary between the first and fourth which gradually merge into each other.

In the north-west the Punjab extends beyond the outer range of the Himalayas and the Himalayan Division includes country on both sides of this range; cultivation is limited to the lower slopes,

IV.—North-West Dry Area.

38. Shahpur.	44. Bahawalpur State.
39. Mianwali.	45. Muzaffargarh.
40. Montgomery.	46. Dera Ghazi Khan
41. Lyallpur.	(including the Biloch
42. Jhang.	Trans-Frontier tract).
43. Multan.	

valleys and foot hills, but amongst these is often very rich. Irrigation is derived from the numerous mountain streams, the waters of which are spread over the valleys and lower slopes by small artificial watercourses; grazing is

plentiful and forests provide fuel and wood far in excess of local requirements. The climate is temperate in summer and rigorous in winter, the highest hills are covered with perpetual snows and in winter many of the tracts beyond the outer range are cut off from communication with the outside world by an impassable barrier of snow. The rainfall for this division averages 57 inches as compared with 26 inches in the province as a whole.

To the north-west of this area the Himalayas run into the Kashmir State, but throughout the length of the province, separating the hill country from the unbroken plains, runs a strip of fairly level land broken by foot-hills in which the proximity of the mountains affects the climate and rainfall. In summer the temperature rises to much the same height as in the plains to the south, but the winter is cooler, and throughout the year there is much more moisture in the atmosphere. The water level is close to the surface and there is much irrigation from wells; there is also some irrigation from intermittent torrents which descend from the hills behind Gujrat; and parts of Hoshiarpur, Gurdaspur and Sialkot are also irrigated by perennial canals which however give their main irrigation after passing through them into the lower plains. The rainfall for this portion averages 29 inches in the year.

The southern and major portion of the province lies in the plains, relieved here and there on the west by an outcrop of bare waterless hills; the eastern part of these plains lies in the Indo-Gangetic Plain and the Western in the North-West Dry Area. The two are mainly distinguished by the difference in rainfall and in water-level; the former has an annual rainfall of 21 inches as opposed to only 9 in the latter: previous to the days of extensive canal irrigation the two were very markedly different in fertility, and the western area consisted largely of bare expanses of desert. The spread of canal irrigation has modified the contrast and at the last census it was suggested that the districts of Shahpur, Jhang, Lyallpur and Montgomery, which lie on the dividing line and all of which receive much canal irrigation, might advantageously be grouped in the Indo-Gangetic Division. By nature they are more akin to the North-West Dry Area, and it is doubtful whether an artificial change in their irrigation justifies their exclusion from this division; such exclusion would render comparison with former statistics extremely difficult; it has therefore been decided to retain the former system of grouping in its entirety.

Land Tenure.

6. The Punjab is essentially an agricultural country farmed by peasant proprietors; the whole area is divided up into blocks of land known as villages; for each of these blocks the government maintains a collection of revenue records, the principal being known as the "Record of Rights" and containing lists of all the owners and tenants in the village together with detail of the lands owned or cultivated by each. The distinguishing mark of a village is that it has a separate record of rights, and the term is applicable to the whole tract of land dealt with in that record and not to the collection of houses in which the villagers live. The most usual forms of tenure can be indicated best by a description of the way in which a typical village has come into being; it must be understood that, whilst the process of evolution may be true of a large number of villages, it must not be taken to be of universal application. In its simplest form the village may be regarded as having been founded by one man, who, by merely taking possession or by receiving a grant from a local ruler, obtained the ownership of all the lands included within its boundaries; he cultivated some of these and regarded the remainder as his property, to be grazed upon or to be broken up at his pleasure. On his death the members of his family inherited his rights jointly, and each member probably cultivated separate plots and added to them by breaking up further areas in the waste, each however recognising that his rights were bounded by his share by inheritance. In the course of time family dissensions, or mere convenience, led some members of the family to regard the lands in their cultivating possession as their individual property but they had no grounds on which to base an exclusive claim to any portion of the unbroken

waste. In early days this separate ownership probably grew up without special agreement; hence in some cases it remained in the proportion of the shares by inheritance whilst in others the separate properties varied in size by reason of particular members of the family being more energetic in breaking up the waste or being stronger than their fellows and being able to exercise their acquisitiveness in excess of their theoretical right. In the course of time the custom arose, and has been given the sanction of law, that separation of joint lands should be by agreement or by application to the courts; such partition is usually made with reference to ancestral shares, modified by the facts of existing possession.

The tenure of the village lands depends mainly on the extent and nature of the partition that had taken place before accurate land records came into existence. If when these were first compiled the separate rights were found to be in direct relation to the theoretical rights by inheritance, then the rights in the undivided waste were held to be in the same proportion, and subsequent partitions were made on the basis of the family tree. If existing rights were found to be irreconcilable with the theory of proportional inheritance, the rights in the waste might be held to be in the ratio of the extent of existing rights of ownership in the cultivated land, or perhaps in the ratio of the revenue payable by each member of the village.

The original simplicity is complicated by the fact that original owners may have sold or gifted portions of their separate holdings; in some cases such gifts and sales have been understood to include the dependent share in the undivided lands, in others not. In cases where a share in the waste has followed the transfer of separated lands the effect is merely to introduce an outsider into the group of owners and to modify the shares in the joint property; in the reverse case the outsider becomes an owner of a specific plot of land only, whilst the original group of owners continue to have all the rights in the waste.

Each owner may cultivate his holdings or have it cultivated for him by servants or tenants, the most usual form of rent being a specified portion of the produce raised by the tenant.

Sometimes an owner may have had difficulty in securing tenants and has had to offer unusual attractions to obtain them; he may have guaranteed a fixity of tenure extending for their lives or even to their descendants; or he may have gone away and neglected his land, and the tenants may have gradually acquired prescriptive rights in his absence, which on his return he has found necessary to recognise. In these and in many other ways has arisen a class of tenant, known as an "occupancy tenant," who has an hereditary right to cultivate the land on payment of a rent to the owner which may or may not be an economic rent; in some cases such rent is merely nominal or is no more than the government revenue.

Very similar to the case of an owner whose land is in the possession of occupancy tenants paying a nominal rent, is that of the superior and inferior owner; in this case the inferior owner exercises practically all rights of ownership except that he pays certain dues to a superior owner. Both occupancy tenants and inferior owners may or may not have the power to transfer their rights to persons other than their heirs, and in cases where they have not this power an attempt to do so may result in the land reverting to the full ownership of the owner or superior owner.

It is probable that in early days the local ruler was recognised as the ultimate owner of all land within his territory, and that individual land owners were regarded as holding from him; this view was gradually modified till it was merely recognised that the ruler had a right to a certain share of the produce of all lands, and this share was the original form of land revenue. In the present day, though the land revenue is collected in cash, it is based on the theory that government has a right to one-half of the net produce of the land after deduction of the cost of cultivation from the gross produce, the cost of cultivation including that portion of the produce which is retained by a tenant; in other words government is entitled to one-half of the rent received by a non-working landlord. In practice the cash land revenue nowhere approaches this theoretical right; but the important point is that land revenue is not a tax, but is closely related to a rent.

Land revenue is payable to government, but there is a class of people known as "jagirdars" who are entitled to the land revenue of particular tracts

of land. Such tracts are known as their "jagirs" and originated either as direct grants from government, or as a recognition of their former quasi-sovereign rights over the area.

We have now encountered the main features of the land tenures of the Punjab plains; the commonest type is that in which a landowner owns individual lands with full rights of alienation and disposal, together with a joint right in an undivided waste, this joint right usually being capable of realisation as an individual right by partition with the other sharers; such an owner may let his land from year to year to tenants who pay him a portion of the harvest as rent, and he is responsible to government for the revenue assessed on his individual land together with a share of that assessed on the joint village lands.

The theoretical account given above of the origin of this system explains the fact that it is usual to find the individual lands of one owner scattered about in small plots throughout the village; repeated partition leads to more and more scattered holdings, and it is quite usual to find an owner of no more than three acres with thirty or more separate fields scattered about over an area of two or three square miles. Repeated sub-division, and wide distribution of scattered holdings are the bane of the indigenous system of land tenure; it requires little imagination to picture the waste of effort, and the difficulties as to trespassing and rights-of-way, with which it must necessarily be connected.

The description given above applies, almost universally, throughout the central and south-eastern parts of the province; and it should be noted that these were the first parts to come under British rule, and also that the tenures in them resemble those in the United Provinces which had long been familiar to British administrators before the Punjab came under their sway. In the sandy stretches of the south-west, the hilly country to the north-west, and more than all in the Himalayan tracts, the distribution of rights was originally very different and the type of village described was unknown; but the early British administrators with pre-conceived ideas on these subjects managed to graft the types of land tenure with which they were familiar on to a countryside to which they were totally alien.

In the south-west the population was still largely nomadic and pastoral when it first came under British sway; dotted over the country were small hamlets occupied by a few persons who had built a well and cultivated a small patch of land round it; these people regarded the surrounding country as subject to their grazing rights, but had no sense of any joint ownership in the waste, and ascribed their ownership to the fruits of breaking up the soil and not to inheritance. Such small hamlets were artificially grouped in villages, and the theory of joint ownership of the waste within the boundaries of such villages was artificially introduced; at the same time vast areas of waste which had never been subject to the plough were found to be absolutely unappropriated and were, in accordance with local sentiment, declared to be government property.

In the north-west, strong warlike tribes had collected in fairly large villages for the sake of mutual protection, these villages being strongholds rather than agricultural settlements. Scattered round these strongholds were the small hamlets of the non-warlike population, who existed under the protection or subject to the tyranny of the leading tribes; their settlements were too unimportant to attack and usually consisted of a few houses built in the immediate vicinity of the lands cultivated by their owners.

In the Himalayas the dense forests and the precipitous nature of the country rendered cultivation possible only in isolated patches. Anyone who cleared and broke up a small area of land built his house in the clearing, and except in the more continuous and fertile valleys man was not able to satisfy his gregarious instincts. Each settler would collect his firewood and graze his cattle in the surrounding forests, and thus gradually create a right over the waste in the vicinity of his clearing; where clearings were close together convenience led to neighbouring settlers establishing joint rights in the waste, and as population increased and interests began to conflict specified areas of waste would become recognised as subject to the exclusive rights of user of several settlers.

Thus a whole valley, the whole of one side of a hill, or any other natural division of the country might become subject to the rights of user of several settlers who had individual cultivated clearings scattered about over it. These settlers with common rights would not necessarily be related and might belong to

entirely different tribes or castes. A small tract of country, subject to the common rights of user of persons residing in scattered residences over its surface, is the natural unit of these hills; such units are known by different names in different localities, and in many of the hill states they form the administrative unit and are known in English as villages; in others they are so small as to be useless as administrative units and have been grouped together in blocks to suit the local form of administration. Throughout the Himalayas the village unit, as demarcated for census purposes, is an artificial one; and no statistics concerning the number, size or proximity of villages within the Himalayan tract are of any utility whatsoever.

A comparatively modern innovation in land tenure and in types of villages has been introduced during the process of colonisation of government waste lands in the west which have been rendered fit for cultivation by the introduction of canal irrigation. On being irrigated these wastes were divided up into villages of convenient size and the lands of each village which were fit for cultivation were granted to settlers from the old districts. The grants took various forms; some whole villages were let out to capitalists on payment, others were granted to persons who deserved well of government; more usually however separate plots in each village were granted and the grantees were required to take up residence and build houses on a site set apart for the purpose. In the first instance the grantees were usually given rights of occupancy tenants holding under government, various conditions being attached to the tenancies; these always included the duties of taking up permanent residence and cultivating the land allotted; other conditions such as the keeping of brood mares for horse-breeding, the breeding of camels, the introduction of scientific methods of agriculture, the cultivation of superior varieties of particular crops, and so on, were sometimes enforced in addition. In all villages a certain area was not allotted and was retained by government to be utilised as grazing grounds or for some other common purposes.

After the settlers had been some years in occupation and had demonstrated their intention of taking up permanent residence and had made satisfactory progress in breaking up and cultivating the lands allotted to them the majority of those who did not hold on special conditions were allowed to purchase proprietary rights in their tenancies. After they had done so the type of village evolved closely resembled that in the south-eastern plains, the main difference being that instead of the waste land being common property it was unallotted and remained the property of government though devoted to the common use of the villagers. Such villagers can, of course, trace no descent from a common ancestor, and do not form such a corporate body as the inhabitants of old villages; but at the time of colonisation efforts were made to group together members of one or two associated castes coming from the same part of the province, and though the villagers are not necessarily connected by family ties, they are far from being chance collections of miscellaneous origin.

7. Of the twenty-five million inhabitants of the Punjab no less than four-
teen and three quarter millions are of agricultural occupation, whilst many more
follow agricultural pursuits in addition to some other occupation. Subsidiary
Table I at the end of this chapter presents a few agricultural statistics, and it
is necessary to explain the terms used therein. "Cultivable area" includes land
actually under cultivation, fallows, and waste available for cultivation; such
waste does not include areas in which cultivation is forbidden by law or custom,
such as reserved forests or common lands set apart for a specific purpose. It
does however include common lands which can be made available for cultivation
by partition even though such partition has not been effected. "Gross
cultivated area" means the area actually sown in any one year with no
deduction for failure of crops, any land sown at both seasons of the year
(i. e., double-cropped) being counted twice. "Net cultivated area" means the
area sown in any one year, the double-cropped area not being counted twice.
In other words net cultivated area refers to the area of land sown, whilst
gross cultivated area refers to the area of crops sown; to avoid confusion I shall
generally refer to gross-cultivated area as the sown area.

Cultivation.

It will be noticed that both gross and net cultivated areas refer to areas of a particular year and will fluctuate annually according to the nature of the

conditions at the time of sowing; neither of them include land which lies fallow for the whole year, though such land may be regularly though infrequently cultivated.

According to the subsidiary table, 65 per cent. of the total area of the province is fit and available for cultivation, whilst the net and gross cultivated areas amount to 59 and 67 per cent. respectively of the cultivable area; in other words the net and gross cultivated areas amount to 39 and 44 per cent. of the total area of the province. The table also shows that 40 per cent. of the gross cultivated area, or nearly 18 per cent. of the total area, is irrigated. The figures in the table however include many for States which, owing to an incomplete system of land and crop survey, are of doubtful accuracy. The conditions of agriculture within the States of the Punjab closely resemble those in adjacent British Territory, and the figures which will be discussed in this and the two following paragraphs are those for British Territory only which rest on an unassailable basis owing to the completeness of the land revenue records.

In the records-of-rights, which are revised every four years, the term cultivated area includes fallows which have been under crops sufficiently recently to warrant the belief that their cultivation has not been permanently abandoned, and this cultivated area is described as irrigated from wells or canals if it can be, and has recently been, so irrigated, notwithstanding the fact that it was not so irrigated in the year when the record was prepared.

According to the records-of-rights prepared in the four years 1914 to 1917, which are representative of the last decade, the cultivated area amounted to 29,140 thousand acres in British Territory excluding the tribal area across the border of Dera Ghazi Khan. The total area of this tract is 27,280 square miles, so that the cultivated area amounts to 47 per cent. of the total. Of this twenty-nine odd million acres of cultivated land, exactly one half was entirely dependent on rain for its moisture, 17 per cent. could receive irrigation from wells, 27 per cent. from canals and about 1 per cent. from other sources of irrigation; whilst the remaining 5 per cent. was liable to inundation from rivers.

Turning now to records of the area sown each year, the average for the decade since the last census amounts to 27,887 thousand acres, or 45 per cent. of the total area, a very slight difference from the gross cultivated area shown in the subsidiary table which includes Punjab States and was worked out from the figures for 1921 and not for an average of ten years. Of this sown area, 13 per cent. was actually irrigated from wells, 30 per cent. from canals, and rather less than 1 per cent. from other sources; this shows that 44 per cent. of the sown area was irrigated as compared with 40 per cent. shown in the subsidiary table.

Irrigated crops are less liable to failure than those which depend entirely on rain or natural inundation for their moisture; the figures (averages of the ten years since last census) for crops grown with and without irrigation are shown in the margin, the units being thousands of acres; it will be seen that whilst rather less than 44 per cent. of the crops sown are irrigated, yet, owing to the smaller proportion of failure amongst these, no less than 49 per cent. of the matured crops are irrigated; remembering that the yield of all crops is materially increased by irrigation it is clear that considerably more than half the produce of the province is grown on irrigated lands.

The revenue department, in addition to compiling statistics of area actually

Crop.	Sown area in thousands of acres.	Produce in thousands of tons.	Value in lakhs of rupees.
Autumn crops—			
Sugar cane ..	412	315	258
Rice ..	829	401	181
Maize ..	1,123	379	171
Bajra ..	2,355	279	147
Cotton ..	1,540	373 (bales)	123
Jowar ..	1,021	110	53
Spring crops—			
Wheat ..	8,951	2,840	1,620
Gram ..	3,873	2,840	1,620
Oilseeds ..	1,172	161	130
Barley ..	1,099	308	126

sown and matured each year, prepares an estimate of considerable accuracy of the total produce of the principal crops; the marginal table has been prepared from these statistics and estimates in order to show the relative importance of the principal crops produced. It is of course impossible to value grain produced over a term of years in different places, and the last column of figures is inserted merely as an indication of comparative values

and must not be given any meaning beyond this. It is calculated from averages of normal prices at harvest time in the largest producing districts; these normal prices are fixed independently for each district by the revenue department, and were last revised in 1916-17.

The ten crops given in this table account for eighty per cent. of the total area shown, and on them the agricultural welfare of the province principally depends; amongst them it will be seen that the spring crop far outweighs the autumn crop in importance, and that the value of wheat alone equals that of all the others put together.

8. The importance of irrigation in provincial agriculture has been demonstrated in the last paragraph; the sources from which irrigation is derived are shown in the margin where the source of supply for every unit of one thousand acres is shown. Canals irrigating 688 out of every thousand acres head the list in importance, and of these the majority are owned and worked by Government.

Next come wells which irrigate 299 out of every 1,000 acres; these are in general private property owned by the landowners or by groups of landowners. The irrigation shown as from "other sources" is mostly by lift from ponds, rivers and marshes, though it includes a variety of other methods of little importance.

It may be noted that low-lying lands in the neighbourhood of rivers are often inundated at flood time and that this fact assists their cultivation; such inundated lands are usually regarded as unirrigated. The fertilising floods are often spread over a larger surface by short cuts and dams than they would reach if left to themselves, whilst sometimes inundation canals of considerable magnitude carry the waters far beyond their natural limits; there is then no definite border line between lands inundated directly from rivers and termed unirrigated, and those which are irrigated by inundation canals.

The marginal figures show the percentage of the average matured area which was irrigated from canals and wells in the decade before the census; the districts have been arranged in order to show in which irrigation plays the most important part; the new district of Sheikhupura is included with Gujranwala as separate figures for it were not available. It will be seen that in eleven out of the twenty-eight districts named more than half the matured crops had received the benefits of irrigation.

Lands irrigated from wells are the most fertile in the province, for the expense and labour of this type of irrigation prevents its adoption except with the prospect of a commensurate return, and leads to an intensive system of cultivation, whilst the continual presence of the cattle required to work the well provides manure in excess of that available for other types of cultivation. During the last decade the number of masonry wells in use increased from 245,239 in 1911 to 265,879 in 1920; but it cannot be assumed that the total number of wells increased proportionately as irrigation from wells is extended in

PERCENTAGE OF MATURED CROPS THAT ARE IRRIGATED.

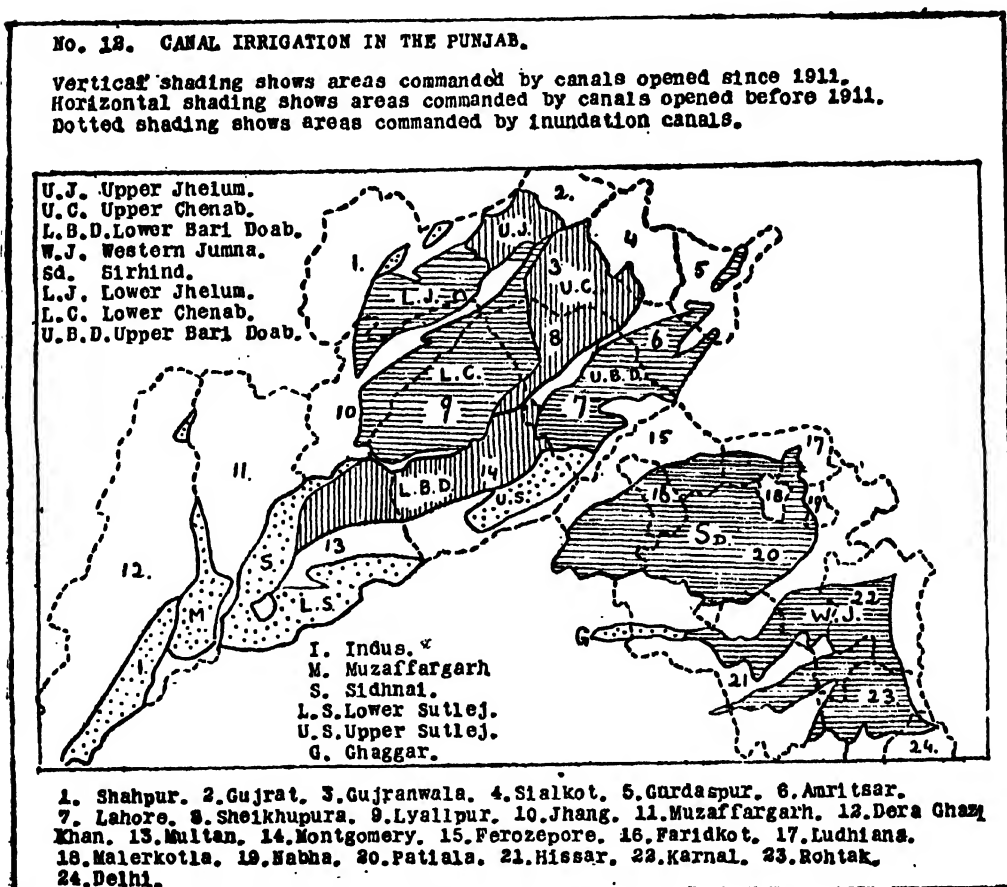
	Total.	From canals.	From wells.
✓ Lyallpur	98	07	1
✓ Montgomery	87	64	23
✓ Multan	87	73	14
✓ Jhang	83	58	28
✓ Lahore	78	56	22
✓ Muzaffargarh	77	53	24
✓ Gujranwala	76	55	21
✓ Shahpur	75	64	11
✓ Amritsar	70	40	30
✓ Jullundur	54	..	54
✓ Sialkot	53	5	48
✓ Ferozepore	46	32	14
✓ D. G. Khan	43	32	11
✓ Ludhiana	37	9	28
✓ Karnal	36	22	14
✓ Gujrat	36	21	15
✓ Gurdaspur	28	11	17
✓ Rohtak	27	19	8
✓ Kangra	26	26	..
✓ Gurgaon	17	6	11
✓ Hissar	16	15	1
✓ Mianwali	12	5	7
✓ Hoshiarpur	11	2	9
✓ Attock	9	1	8
✓ Ambala	6	..	6
✓ Jhelum	5	..	5
✓ Rawalpindi	2	..	2
✓ Simla .. ..	..	..	..
British Territory	48	35	13

seasons of light rainfall and contracted in other seasons; considerable areas of land can be irrigated from both wells and canals, and temporary conditions decide which system is adopted. During the decade the largest area sown with well irrigation was 3,875 thousand acres in 1920-21 whilst the smallest was 2,951 thousand acres in 1917-18; the latter year was one in which unirrigated cultivation was more extensive than in any other of the decade.

Well irrigation demands a fairly high level of the sub-soil water. The districts which employ wells most largely are Jullundur, Sialkot, Amritsar, Ludhiana, Jhang, Muzaffargarh, Montgomery, Lahore and Gujranwala. Except for Jhang, Muzaffargarh and Montgomery, these are all grouped together on the Southern side of the Sub-Himalayan tract; to their North lie districts where there is sufficient moisture for unirrigated cultivation, whilst to their South the water level sinks and renders well irrigation more difficult. In the former districts the lift is so small that the wells can be worked by Persian Wheels which carry a continuous band of earthenware pots; further South though wells are in use they are more scarce and their depth is so great that the Persian Wheel has to be replaced by the less efficient rope and leather bucket.

The well has lost much of its importance since the introduction of extensive canal irrigation. Without its canals the Punjab would be unable to support its population, and the main factor in the movement of the rural population for the last twenty years has been the extension of the canal system. Districts such as Jhang, Lyallpur and Montgomery which now support a dense agricultural population were practically desert country before the canals opened them up, and were then inhabited by a very sparse population of shepherds and graziers.

The inset map shows the areas commanded by the more important canal systems of the province and on the next page are reproduced a few leading figures concerning them.



PRINCIPAL CANAL SYSTEMS.

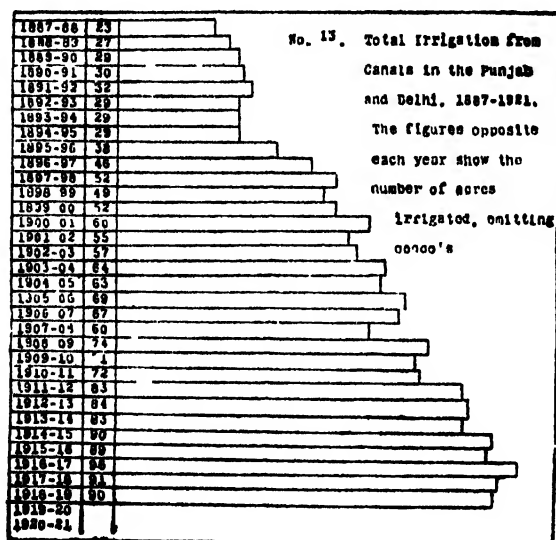
1	2	3	4	5	6	7	8	9
Serial No.	Name.	Length of Main Line in Miles.	Length of Distributionaries in Miles.	Culturable Area commanded in thousands of acres.	Average Area irrigated annually in thousands of acres.	Date of commencement of construction.	Date of first irrigation.	Date of completion of construction.
1	Western Jumna	329	1,890	2,324	803	Before annexation 1858—Sirsa Branch	1820	1886 }
2	Sirhind	587	3,423	3,918	1,437	1867-68	1891-92	1895 }
3	Upper Bari Doab	340	1,545	1,504	1,163	1849-50	1883-84	1886-87 }
4	Lower Bari Doab	132	1,188	1,409	878	1906	1880-81	1878-79 }
5	Upper Chenab	173	1,178	1,533	649	1905	1913-14	31-3-1917 }
6	Lower Chenab	427	2,242	2,593	2,317	1884 (a) 1890	1912-13	31-3-1917 }
7	Upper Jhelum	128	642	572	348	1905	1887 (a) }	1889-1900 }
8	Lower Jhelum	196	992	1,252	807	1897	1892 }	31-3-1917 }
9	Upper Sutlej (Inundation Canals).	328	394	900	328	Some existed before annexation and some added later; 1855-1870.	1915-16	31-3-1917 }
10	Sidhnai	68	255	344	270	1883-84	1855	1858-59 }
11	Indus	442	301	423	237	Existed before annexation.	1884	1885-86 }
12	Shahpur	71	66	63	37	1862 to 1864	1886	1886 }
13	Ghaggar	97	34	108	25	1896-97	Prior to 1849	1849-50 }
14	Lower Sutlej	397	287	905	288	Before annexation.	1870	1870-71 }
15	Chenab	266	64	380	183	Before annexation.	1897	1898-99 }
16	Muzaffargarh	422	718	675	368	Before annexation.	Were in operation prior to the annexation of the Punjab by the British	Some improvements were finished in 1895. Ditto. Some improvements were finished in 1896.

(a) As an inundation canal system.

Note.—The average area recorded in column No. 6 is that for the ten years 1911-12 to 1920-21 inclusive. But in the case of the three canals of the Triple Project which have not been in existence for ten years, the area which they are designed to irrigate is shown instead.

The first eight of these are perennial canals with permanent headworks on the large rivers of the province, so designed that the canals run even when the rivers are at their lowest. The remainder are groups of small canals, few of which extend very far inland from the rivers from which they take their supply, and in general they only come into operation when the rivers are in flood.

The records of area actually irrigated are available back to the year 1887-88



when all the canals then in existence irrigated 2,341 thousand acres, since then the extension and improvement of existing canals and the construction of new ones has led to a steady increase in irrigation as is shown in the marginal diagram. In 1920-21 the total area irrigated amounted to 10,274 thousand acres and the greatest area ever irrigated in one year was 10,457 thousand acres in the previous year.

The Western Jumna Canal, which was taken over in the early half of the 19th century, irrigates portions of the Karnal, Rohtak and Hissar districts, and small areas in Patiala State and the Delhi Province. The Sirsa Branch, which irrigates portions of Patiala and Hissar, was first opened in 1891.

• The Upper Bari Doab Canal has also been in existence so long that, as in the case of the Western Jumna, immigration to the areas it commands had already taken place before the first census and therefore cannot form the subject of statistical study. It is supplied from the Ravi river and irrigates very large areas in Lahore and Amritsar and a comparatively small area in Gurdaspur.

The Sirhind Canal was first opened to irrigation in 1883-84, it distributes the waters of the Sutlej in Ludhiana and Ferozepore Districts, and in the Patiala, Jind, Nabha and Faridkot States.

The Lower Chenab, with headworks at Khanki on the left bank of the Chenab, was first opened in 1887-88 as an inundation canal and was opened as a perennial system in 1892, but was extended and improved constantly and scarcely reached its present scale of irrigation till 1911. It irrigates practically the whole of the Lyallpur District and parts of Gujranwala, Sheikhupura and Jhang; the area which it commands was mainly uncultivable waste before it received irrigation and the canal led to an enormous migration from the congested districts to the newly opened up country. As the greater part of the land was government property colonisation was carried out by government which granted land on various conditions to residents of thickly populated districts; most of these grantees have now become owners of the land which they were first granted as tenants. The result is that the whole tract is populated by persons who are connected by relationship and social ties with inhabitants of different districts all over the Punjab, and the colony is a focus of migration as the inhabitants and their relations are constantly passing backwards and forwards between it and the districts in which their ancestors lived and in which many of the inhabitants still have proprietary interests.

The Lower Jhelum Canal is of much more recent construction and was first opened to irrigation in 1901; it irrigates a large portion of the Shahpur District and a smaller area in Jhang; this too commands an area which was very thinly populated when in its natural condition, and of which much was government waste available for cultivation. Here too is now collected a population including persons keeping in constant touch with their relations in districts scattered throughout the province.

The other three large perennial canals that now contribute to the fertility and wealth of the province have all been opened to irrigation during the decade since the last census. They form collectively what has been known as the Triple Canal Project and are inter-related in a peculiar way. The districts of Montgomery and Multan included vast areas of waste, which, could they but be irrigated, would have formed yet another area in which to found a canal colony and still further relieve the pressure of the ever-growing population of the old districts. The difficulty was that the Ravi, the only river from which direct irrigation could be obtained, was already pouring practically the whole of its cold weather supply into the Upper Bari Doab Canal; the waste area available could have been irrigated from it in the flood season only, and that would not have rendered it suitable for colonisation on a large scale. On the other hand the Jhelum river carried a supply which at its lowest was well in excess of the requirements of the Lower Jhelum Canal. The solution of the difficulty, which is now an accomplished fact, was to use the surplus water of the Jhelum for the ultimate irrigation of the tracts in Montgomery and Multan. The Upper Jhelum Canal takes water from the Jhelum and irrigates part of the Gujrat district, but carries a far bigger supply than is required for that irrigation alone; the surplus, after flowing right across the Gujrat District, is released into the Chenab river a little above the head-works of the Lower Chenab Canal. Thus reinforced the Chenab river carries a supply in excess of that required for the Lower Chenab Canal and this supply is now taken off higher up the river by the Upper Chenab Canal which irrigates large areas in Gujranwala and Sheikhupura Districts and still has a large flow left which it empties into the Ravi river. This supply is then taken out of the river on the opposite bank by the Lower Bari Doab Canal which irrigates the Montgomery and Multan Districts and has thus opened up a new area for colonisation. Actually no water of the Jhelum gets on to the land in the Lower Bari Doab Colony, but it does cross the Chenab and by feeding the Lower Chenab enables the Upper Chenab to draw off some of the waters of the Chenab without prejudice to the Lyallpur colony and it is the waters from the

Chenab that cross the Ravi and find their way into the Montgomery and Multan Districts.

Work on the Upper Jhelum commenced in 1905 and it was opened to irrigation in 1915 and completed in 1917. It was designed to take in a supply of 8,500 cubic feet per second at the head and to deliver 7,812 of these into the Chenab; it commands 571,783 acres and is intended to irrigate about 348 thousand acres. The total area irrigated during the first few years after it was opened is shown in the margin. It irrigates a tract which is already inhabited and in the ownership of the residents; it is therefore unlikely to cause immigration to any great extent though it will add to the prosperity of the tract irrigated and enable it to support a larger population.

Year.	Acres.	irrigation in 1915 and completed in 1917. It was designed to take in a supply of 8,500 cubic feet per second at the head and to deliver 7,812 of these into the Chenab; it commands 571,783 acres and is intended to irrigate about 348 thousand acres. The total area irrigated during the first few years after it was opened is shown in the margin. It irrigates a tract which is already inhabited and in the ownership of the residents; it is therefore unlikely to cause immigration to any great extent though it will add to the prosperity of the tract irrigated and enable it to support a larger population.
1916-17	117,605	
1917-18	173,004	
1918-19	246,609	
1919-20	298,857	
1920-21	345,189	

The Upper Chenab which was commenced in 1905 and completed in 1917 was first opened to irrigation in April 1912. It is designed to use 4,944 cubic feet per second for irrigation and to pass on 6,750 into the Ravi; this allows for the irrigation of 648 thousand acres out of the 1,533 thousand which it commands, and it has already worked up to an irrigation approaching this figure as will be seen from the figures in the margin.

The areas it irrigates in Sialkot and Gujranwala are in the hands of private owners and give no room for colonisation, but there are large plots of government waste in Sheikhupura which are already being colonised rapidly.

Year.	Acres irrigated.	The Lower Bari Doab was commenced in 1906 and completed in 1917; the first irrigation was given from it in July 1913, and the areas irrigated till the end of the decade are shown in the margin. It is designed for a supply of 6,750 cubic feet per second at the head, which is the exact amount rendered available by the outflow of the
1913-14	123,236	
1914-15	164,110	
1915-16	211,882	
1916-17	325,062	
1917-18	437,477	
1918-19	382,835	
1919-20	426,864	
1920-21	542,656	

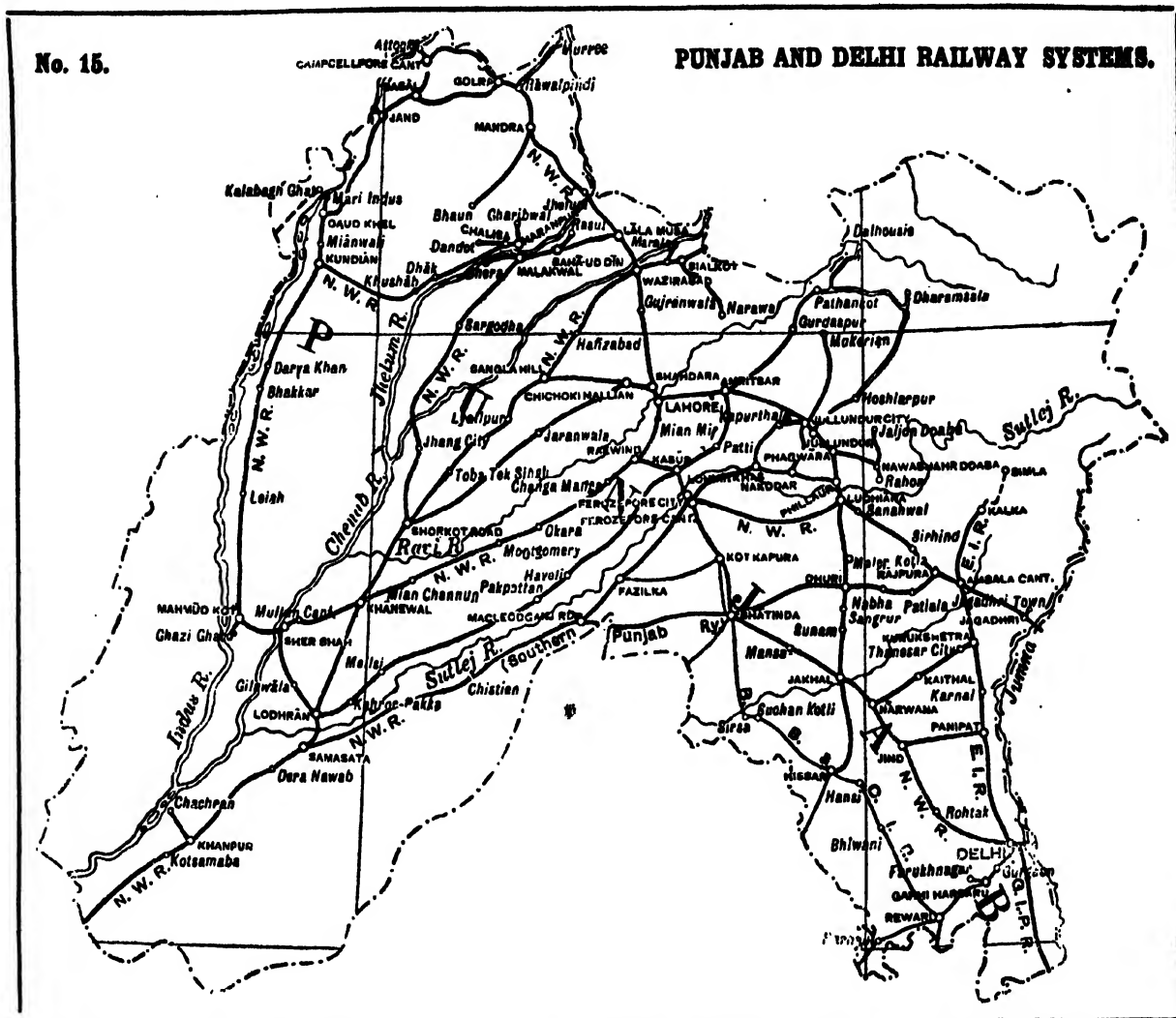
Upper Chenab; this is to irrigate about 878 thousand out of the 1409 thousand acres which are commanded by it.

None of the three canals could work up to their proper capacity until the Upper Jhelum was completed in 1917; and it is probable that the irrigation from all three will increase considerably before they settle down to steady normal working.

9. The Punjab is fortunate in possessing an extensive system of railway communications. The main line of the North Western Railway from Karachi enters the province in the extreme south-west, and runs up to Samasata in Bahawalpur State whence it divides and connects up with a system of lines running more or less parallel with the great rivers and spreading out like the leaves of a fan till they reach another main line which runs along the northern boundary of the province from Attock *via* Rawalpindi and Lahore to Ferozepore and thence to Delhi.

Communi-
cations.

This fan-shaped system of lines serves the whole of the western part of the province within a triangle based on Campbellpur and Ferozepore with its apex at Samasata.



From Lahore to Delhi there are two main lines, one *via* Ferozepore and Bhatinda and the other following the course of the Grand Trunk Road through Amritsar, Jullundur, Ludhiana and Ambala and thence through part of the United Provinces. These two main lines have numerous cross-branches and are also connected with other railways, such as the East India Railway from Delhi to Kalka *via* Ambala; and the Bombay, Baroda and Central Indian Railway from Delhi to Rewari and thence to Bhatinda *via* Sirsa and Hissar; together these various lines and branches form a very complete net-work over the central and south-eastern parts of the province.

The only portions of the province not served by railways are the Himalayan tract in the north-east, in which the only line is the short Kalka-Simla Railway, and the Dera Ghazi Khan District and the eastern part of the Bahawalpur State. The western part of the province, though well served by the fan-shaped system of lines radiating from Samasata, lacks railway communication in a transverse direction; the presence of the rivers and the difficulties in connection with bridging them have prevented the construction of lines running from north-west to south-east.

The main external trade of the Punjab passes down the North Western main line to Karachi, whilst the main lines to Delhi and thence direct to the ports of Bombay and Calcutta and other towns of the Indian continent provide the other most important external trade routes.

The following account of the construction of the Punjab railway system is taken direct from Mr. Calvert's "Wealth and Welfare of the Punjab":—

"The first railway line (Amritsar to Lahore) was put under construction in 1856 and opened for traffic in 1861. Wood had to be used for fuel. The line from Lahore to

Multan, which at that time was connected with Karachi by the boats of the old Indus Flotilla, was opened in 1865. Coal was introduced in 1872, in which year one goods train left Lahore daily for Ghaziabad. Through communication with Calcutta and Bombay was established in 1883. Thereafter progress was steady, if not rapid, as the following details show :—

Main Line.—

South to Lahore	..	..	..	..	231 miles, opened in	1870
Lahore to West	..	..	..	..	418 „	1878
Lahore to North	..	..	..	..	242 „	1880

Branches—

Golra-Basal	..	..	..	..	47 „	1881
Amritsar-Pathankot	..	..	..	..	67 „	1884
Rajpura-Bhatinda	..	..	..	..	107 „	1889
Sind-Sagar	..	..	..	..	342 „	1890
Sialkot (1884) Jammu	..	..	..	..	36 „	1890
Raewind-Ferozepore	..	..	..	..	33 „	1892
Southern Punjab, main line	..	..	..	..	400 „	1897
Narwana-Kaithal	..	..	..	..	23 „	1899
Kundian-Campbellpore	..	..	..	..	120 „	1899
Ferozepore-Bhatinda	..	..	..	..	55 „	1899
Wazirabad-Khanewal	..	..	..	..	201 „	1900
Ludhiana-Jakhal	..	..	..	..	79 „	1901
Kalka-Simla	..	..	..	..	59 „	1903
Ludhiana-Macleodganj	..	..	..	..	152 „	1906
Jech-Doab	..	..	..	..	149 „	1906
Shahdara-Sangla	..	..	..	..	55 „	1907
Khanewal-Lodhran	..	..	..	..	56 „	1909
Amritsar-Patti (1906) Kasur	..	..	..	..	51 „	1910
Kasur-Lodhran	..	..	..	..	208 „	1910
Khanpur-Chachran	..	..	..	..	22 „	1911
Chichoki-Shorkot Road	..	..	..	..	136 „	1911

Notes on the developments which have taken place during the last decade, together with figures bringing this account up to date, will be found in paragraph 39.

The road communications are far less extensive and connected than the railway system; the only coherent system of metalled roads is that connected with the Grand Trunk Road which runs continuously from Calcutta to Peshawar and in its passage through the Punjab connects Delhi, Karnal, Ambala, Ludhiana, Jullundur, Amritsar, Lahore, Gujranwala, Jhelum and Rawalpindi. This road is metalled throughout its length and has recently been much improved by the construction of road bridges over the great rivers of the Punjab, all of which it crosses. Metalled feeder roads branch off from the Grand Trunk Road for short distances throughout its length, the most important being—from Delhi to Gurgaon and Rohtak and to smaller places beyond them; from Thanesar to Pehowa and Chachhrauli; from Ambala to Kalka and Simla; from Rajpura, near Ambala, to Patiala and Sangrur; from Ludhiana to Malerkotla and Sangrur; from Ludhiana to Ferozepore; from Jullundur to Hoshiarpur; from Lahore to Ferozepore and to Sheikhupura; from Gujranwala to Hafizabad and to Sialkot; from Wazirabad to Sialkot and thence to Jammu; and from Rawalpindi into Kashmir *via* Murree.

Other isolated systems of metalled roads are in existence round about Lyallpur; from Multan to Muzaffargarh and thence to Dera Ghazi Khan, in which the presence of a boat-bridge over the Indus only affords through communication in the cold weather; and from Pathankot to Dalhousie and through the Kangra Valley to Kangra, Dharmasala and Baijnath.

Numerous unmetalled roads traverse the country in all directions, except in the west which is badly provided with road communication; these roads are often metalled for a few miles where they approach a town or a line of railway. Unmetalled roads provide all that is needed for the indigenous system of transport of agricultural produce by bullock cart, but are of little use for lighter vehicular traffic or for motor transport.

The extensive canal system of the province supplements the road communications to a very large extent; the main lines of the canals run between broad banks and usually one of these is kept open to bullock carts and other heavy traffic whilst the other, though unmetalled, is kept in excellent repair and, except

in the rains, provides a first-class motor road which, though not open to the general public, can be used by permission when occasion requires.

The rivers and a few of the canals provide facilities for waterborne transport but the strength of the current prevents any regular up-stream traffic and they are mainly used for floating timber from the forests of the Northern hills to the railway system of the plains.

Except in the west the combined systems of communication are excellent ; but in the west the scarcity of metalled and even of unmetalled roads allied with a railway system which has few lines running from west to east leaves much to be desired and the communications are sadly behind the requirements of the rapidly increasing population of the canal colonies.

The postal and telegraph systems of the province are very complete, and the most inaccessible spots have unexpectedly frequent deliveries. The postal authorities have done much to hasten the improvement of road communications in the hills by the adoption of motor services beyond the limits of the railways. Railway and Canal telegraph lines extend to tracts beyond the reach of the Government telegraph system, and these can be used for official purposes and, in cases of emergency, by the general public.

A notable development of the past decade has been the extension of the telephone system ; many towns have small systems of their own and trunk lines connect Delhi, Ambala, Kalka, Simla, Jullundur, Amritsar, Lahore and Rawalpindi and extend into the North-West Frontier Province.

Civil wireless telegraph stations are in existence in Delhi, Jutogh (Simla) and Lahore ; there is also a military radio station in Rawalpindi, whilst the Royal Air Force maintain stations in Lahore and Ambala.

Rural Economy.

10. Under former rulers the revenue necessary to support them and their large armies and numerous courtiers was collected in kind and was only limited by the cultivators' ability to pay ; and the authorities were always ready to eject him in order to install anyone who would pay more revenue. Anything which a man produced in excess of his requirements was taken from him in the form of revenue, whilst, even had he been able to keep a surplus from the revenue collector, the absence of communications and markets prevented him from profiting by its sale. In these conditions there could be no rent over and above the revenue, and land possessed no capital value.

The village was in every respect self-supporting ; it had its own carpenter, blacksmith, potter, weaver and other artisans, all of whom rendered services to the agriculturists for which they were paid by shares of the harvested grain ; petty shopkeepers existed in every village and were mainly paid in kind. Cash was practically unknown to the cultivator ; the only form of capital he could produce was sunk in jewellery which was generally concealed on account of the insecurity of the times. As a result of these conditions no members of the rural community possessed fluid capital ; land had no value both because there was no one to purchase it and because there were no excess profits to be made from it ; sales of land were practically unknown before the advent of British rule.

The immediate result of the British occupation was to introduce security of tenure and a greatly reduced revenue.* The reduction immediately created a surplus, and, with the growth of communications, markets came into existence and this surplus became saleable. This encouraged extension of cultivation, the more so because the land revenue was fixed for long periods and during their continuance no extra revenue was demanded on account of new cultivation. As cultivation was extended and the surplus for sale became larger and larger a very large export trade was slowly established. In old days, there being no surplus even in normal years, the failure of the monsoon rendered famines inevitable ; at the present day irrigation renders the results of a bad monsoon less disastrous whilst the deficit in produce does not lead to famine so much as to reduction of export. The normal export provides a margin up to which produce may be decreased without stinting the province. Export also tends to prevent violent fluctuations in price as, unless the produce of any year is insufficient to meet provincial requirements, prices will be governed by world prices and will not vary so readily as a result of local seasonal conditions.

* In ancient days the revenue demanded averaged about 30 per cent. of the gross produce and rose to considerably more provided it could be taken without annihilating the producer ; it is estimated that the present revenue amounts to about 5 per cent. of the gross produce.

All these facts have led to an amazing increase in the productivity of the land and the prosperity of the people. The creation of an agricultural surplus led to the possibility of rent and with its advent arose the new relation of land-owner and tenant, the former being able to live without expenditure of his own energy and resources; land immediately gained a commercial value and sales and mortgage became common.

The whole course of British Rule has been marked by rapidly increasing land value; up to about twenty years ago the land values were only such as were warranted by the increase in production and prices, but there is little doubt that during the last twenty years they have been more than economic. This is mainly due to speculation in land, encouraged by the steadily rising prices; it has been rendered possible by the fact that cultivators have no means of investing capital except in land or jewellery. With them spare cash has generally gone in unproductive expenditure or in land purchase; and the fact that purchase of land may not return interest on their money is no bar to such purchase.

The increasing prosperity of the people and increase in land values has been accompanied by a great increase in indebtedness. Directly the British occupied the country the revenue, though reduced, was made payable in cash and was fixed irrespective of seasonal variations (in former days the revenue though excessive had perforce been limited by the produce available;) at the same time the British paid the army and the large number of labourers employed on public works in cash. The cultivator, who had no experience of cash transactions, was suddenly asked for regular payments in cash; and at the same time other classes of the community became possessed of cash which they spent in the new markets, thus creating a cash capital which drifted to the local shopkeepers and moneylenders. The conditions necessary to the growth of borrowing were brought into operation—the cultivator needed cash and possessed a valuable commodity in his land on which he was able to raise credit, and the local shopkeeper had amassed a cash balance and was in a position of power when dealing with the cultivator who had no knowledge of cash values; the cultivator in spite of his increased prosperity immediately began to borrow from the moneylenders. In the early days of this movement, when land values were still small, the moneylender advanced money against the coming crop; communications and markets being yet in their infancy the price of the future crop was entirely dependent on the season and hence the moneylender's business was risky; on this account he was entitled to, and did, charge very high rates of interest. As land value increased, and as the moneylender found that the new courts of law would enforce his claims, he began to advance money against the land rather than against crops, and in doing so did not reduce his traditional high rates of interest. The growing impoverishment and financial subjection of the agricultural classes caused great anxiety to government as far back as 1872; many remedies were tried, amongst them the introduction of elastic systems of revenue varying with the nature of the season, and the advance of government loans to agriculturists. All these proved insufficient to stop the evil and, after much discussion, the Land Alienation Act of 1901 was introduced; under its provisions a member of an agricultural tribe may not sell land to anyone except another member of such a tribe nor may he mortgage the land to a non-agriculturist unless the terms of the mortgage include provision for automatic redemption. Since the passing of that Act the financial position of the agricultural classes has undergone steady improvement, sales and mortgages are still extremely frequent, but the balance is in favour of the agriculturists. On the other hand the Act does not appear to have reduced the credit necessary to the conduct of cultivation nor has it led to a decrease in the value of land, which is still freely transferred amongst the agricultural tribes. In some cases members of agricultural tribes have taken to moneylending but, even so, transfer of land to them is less harmful than to the professional moneylender for they are interested in land and realise the factors necessary to its productivity. Continued sub-division of holdings encourages sale for many owners have holdings smaller than that which they could cultivate and are potential purchasers; the scattered nature of holdings may render one plot far more desirable to the neighbouring owner than to its own owner whilst the small size of the plots renders their purchase well within the credit of the villagers. The absence of industries and opportunities for investment and the lack of economic knowledge allow small owners to purchase

land at more than its economic value. As a result sales and mortgages are still excessive in number and extent but do not prejudice the agricultural community as a whole.

The enormous amount of capital sunk in the purchase and mortgage of land has not been a source of benefit to the land itself; the major portion has been dissipated and the only forms of permanent improvement left by the ancestors of the present population are found in the existence of wells and of a few small embankments to prevent floods, in a certain amount of levelling and in the existence of trees which afford timber and shade. Exceptions to this may be found in the hills where the pressure on resources has led to the laborious terracing of otherwise uncultivable hill-sides and, possibly, in the new canal colonies where a more enlightened spirit is beginning to be manifested. On the other hand government has created improvements which affect vast areas, such, for instance, as the great canal and railway systems and the less advanced road systems. It is unfortunate that the direct financial profits which have attended the construction of canals and railways were not also available from roads, for whilst the former are well up to the requirements of the province the latter are woefully undeveloped.

The ancient system of cultivation naturally was limited to the production of food and other local requirements and land was not devoted to the crops for which it was most suited. The absence of surplus did not encourage extension of cultivation and hence plenty of land was available so that each cultivator was able to raise his crops without resort to laborious intensive cultivation. The extensive system of tillage and limited nature of crops entailed work only at certain periods of the year and produced the habit of wasting long periods in idleness; it demanded little manuring and was accompanied by the existence of long fallows and failed to introduce any knowledge of rotational systems of agriculture. The habits of centuries cannot be changed in a short period and though holdings are now small they are still cultivated by the wasteful extensive method. There is an enormous difference between the results produced by the various cultivating castes, yet the difference between the best and the worst is nothing to the difference which could be made in the best by the introduction of scientific methods and continuous labour.

With the introduction of communications the cultivator found that, of his traditional crops, that which had the most easy sale was wheat; as a natural result he has concentrated his surplus production on this crop and a great export trade has grown up in it. In 1870 wheat was grown on about 5½ million acres; since then the area of the province has been greatly reduced, yet the average area under wheat now amounts to nearly 9 million acres in British territory alone. When the British first occupied the country there was no export of wheat, but during the decade 1886-95 the export averaged 278 thousand tons, and during the last decade, in spite of artificial restrictions, the export by railway and river of wheat and wheat flour averaged over 840 thousand tons per annum.

Whilst accurate statistics are not available, it appears to be true that the price of land has risen more than wages of labour, and that wages of labour have risen more than the price of produce which itself has risen more than the cost of production. The non-working landlord takes a fixed share of the produce and pays the land revenue; the land revenue has represented a diminishing share of the produce and hence the landowner has been taking an increasing share in produce of increasing value and gains by the general prosperity. The tenant takes a fixed share of the produce and has to bear the cost of cultivation; the former has been increasing more rapidly than the latter and therefore the tenant is also improving his position. The labourer is better off than before because his wages have risen more rapidly than the price of produce. All classes have benefited with the exception of the owner who cultivates through paid labourers and those who have bought land on borrowed capital. If these statements are true it must follow that owners desire tenants and that tenants desire tenancies; this is verified by the fact that during the last fifty years the number of tenants and the proportion of the total cultivated area which they cultivate has risen very greatly. The tenant has no security of tenure beyond that created by his scarcity value, in consequence he is not encouraged to improve the land; practically all improvements, such as the sinking of wells and planting of trees to provide timber, are carried on by owners and not by tenants. To this extent the increase in the proportion of land cultivated by tenants is an economic loss.

11. The Punjab suffers from many disadvantages tending against industrial progress. All industries collect round sources of power and at the termini of cheap lines of transport. The Punjab possesses inferior coal in the west and iron in the north, whilst oil has recently been discovered in the extreme north-west; this separation of the natural supports of industry militates against its establishment. Water-power exists in the Himalayas but at present is not made available; schemes for its utilisation are now in progress and may provide the basis on which to found industry.

The Punjab is at an enormous distance from the sea; on three sides it is surrounded by sparsely populated countries which will never provide large markets for its industries, and on the fourth side it adjoins the United Provinces with similar means of production; it must therefore look for its markets either to itself or to distant countries. In so far as it provides its own wants it is assisted by its isolation which, by adding enormous freightage to the values of imported articles, creates a natural system of protection. In so far as its industries will supply distant markets, this same fact places them at a great disadvantage with similar industries elsewhere; it follows that the opening for industries in the province is limited to the production of local requirements, especially those of a bulky nature, and of commodities for export which are of small bulk in relation to their value, or which replace raw materials, which are at present exported, by partly manufactured materials of lesser bulk. As regards local requirements there is a large opening for food, clothing, building materials, and all commodities used in agriculture; such industries are already springing into existence; instances are afforded by flour mills, ice factories, tanneries, woollen mills, glass works, saw mills and cement works, but the absence of any manufactures of agricultural implements is most noticeable and is due to the primitive implements which are at present employed. Instances of industries for export are given by carpet factories and cotton ginning factories; the former produce articles of high value in relation to bulk whilst the latter lessen the bulk of raw material which is needed for export. The further manufacture of cotton into yarn or cloth does not lessen its bulk so that spinning and weaving factories would have to compete in foreign markets on even terms with old established factories elsewhere. The exports of the province consist almost entirely of raw material amongst which wheat, pulses, oilseeds, raw cotton and wood largely predominate. Wheat is scarcely more bulky and is far less perishable than flour; no flour mills, beyond those necessary to supply local requirements, could ever be successful. Manufactured wooden articles occupy more space than timber and their production must also be limited to local requirements. Ginned cotton is of less bulk than its products. None of these raw materials therefore provide an opening for export industries. Oilseeds on the other hand greatly exceed their most valuable product in bulk; if the oil were extracted locally greater profits would accrue by reason of the smaller expense of transport, and at the same time the oil cake and other bye-products would form an asset to the Punjab. The export of machinery is rendered impossible on account of its bulk in relation to value, whilst the scattered nature of the mineral resources of the Punjab almost prohibits its production even for local use; but the isolated position of the province renders it imperative that all repairs to machinery should be done within the province; at present the enormous waste due to machinery being out of action whilst spare parts are being awaited is so great that the training of skilled mechanics and erection of extensive repair shops is a crying necessity.

At the present time the demand for industrialism comes from those seeking to employ capital and from the middle classes seeking employment outside the literary professions which are over-crowded; it does not come from a desire to employ unoccupied labour; agriculture employs all the available labour and is providing that labour with increasing profits. A great extension of industrialism can only take place by withdrawing labour now employed in agriculture, and must therefore be accompanied by a decreased agricultural production or by the adoption of agricultural methods which would increase the produce per man employed.

The industrial community, though it may produce the wealth necessary to support itself, must yet have a source from which to draw its food. Its existence therefore depends either on import or on local agricultural surplus; in ancient times neither of these existed and industrialism was impossible; at the present



time there is a local agricultural surplus but large imports of food are prohibited by geographical position, hence all industrial life must depend for its food entirely on the surplus provided by agriculture. As long as the agricultural surplus is devoted to local needs, including the support of the industrial community, a bad season must create scarcity and famine which at once set back the prosperity of all classes ; to avoid this there must be a surplus which is exported so that in times of scarcity the local population can be supported by reduction of exports. For a long time the production of wheat has been such that export has been possible and the local population has been kept from famine ; but although of recent years war conditions have sent up wheat prices enormously, yet in 1921 the supply of wheat happened to be so short that the whole of the wheat crop was required in India with the result that the price rose to previously unknown heights. This fact shows that the export of wheat has not yet become sufficient to provide a perfectly safe margin. This being so the growth of a large industrial population, unless accompanied by greatly increased agricultural production, will be a source of danger.

The problem before the Punjab is that industrialism is required to employ capital and brains but that the necessary labour cannot be obtained except by its withdrawal from agricultural pursuits ; whilst, even if it could be found, means for its support in safety would demand increased agricultural production. The solution would appear to be that the capital and brains should first of all be directed to the improvement of agriculture so that it may provide food for the industrial community without a diminution in the export of food which forms the necessary safety margin against famine and, at the same time, the improvement must be so great as to set free labour which is at present employed in agriculture. The difficulty is lessened by the consideration that in so far as the industrial labour is drawn from agriculture it will not add to the food necessities of the country.

The existence in trade of a whole series of middlemen, the functions of whom could be exercised by one man, provides another source from which industrial labour could be drawn without increasing the drain on the agricultural surplus.

Adoption of advanced intensive cultivation increases the amount of labour per unit of area, but, unless pushed very far, it also increases output per man. The solution is not to be found in crowding men on to the land or in reducing the area under cultivation but in occupying those prolonged periods in which the farmer with his present system spends in idleness ; much can be done in this direction by the introduction of crops which require labour in the off-seasons ; if scientific rotation and artificial manuring were introduced more autumn crops could be grown without prejudice to the spring crop ; the catch-crops which are grown near towns after the spring crop has been harvested could be encouraged, and permanent improvements could be carried out in the off-seasons which would economise effort in the busy periods (for instance, the amount of daily labour which could be saved and the increase in area commanded by a well which could be caused by the construction of permanent waterproof channels are enormous). Capital could be employed in planting orange groves and fruit orchards which, after they were established, would employ less but more continuous labour than wheat cultivation, and yet would yield a greater return.

Up to a certain point the desired result of increased production accompanied with less but more continuous labour could be obtained by intensive systems of cultivation, but up to a certain point only. The most paying crops are usually of a perishable nature, their production must be limited to supplying local markets. (The production of fruit for export would have to be accompanied by the growth of a canning industry which on account of heavy freights would compete on uneven terms with established industries elsewhere).

We have seen that owing to its isolated position the Punjab can never import the bulk of its food, and moreover it must export produce which is suitable for its own food so that scarcity years may be tided over by reduction of export. Hence wheat must always remain the principal product and the principal agricultural export of the country ; the production of perishable and valuable crops must be limited to supplying local markets, or must be raised by rotation with wheat and must not monopolise the land.

Though the Punjab is only just beginning to embark on centralised manufacture it has always possessed cottage industries; much attention has recently been directed to the possibility of improving and encouraging these. It is a matter of general experience that manufactures tend to drive out cottage industries; the latter lack two of the three essentials—labour, capital and organisation—and are therefore at a disadvantage. These two missing essentials, capital and organisation, can be supplied by co-operation, and in this movement lies the great hope for the success of cottage industries in this country. But in other countries where cottage industries have survived in competition with mass production it will be found that they are supplementary occupations of people engaged in other pursuits; in India they are the monopoly of particular castes and their adoption by others is largely prevented by prejudice. If the farmer and his family could be persuaded to spend their spare time in cottage industries they could largely dispense with the services of the occupational castes; much of the work of the potter, the carpenter and the weaver could be dispensed with and the members of these occupational castes would be set free for employment in centralised industries without adding to the existing demands upon the produce of the land. The day however is yet far off before the farmer will consent to consider the matter; at present the tendency is in the reverse direction and the artisan classes are adopting agriculture as a subsidiary occupation to their own. It will be noted in the chapter on occupations that the factory hands employed in carpentering, machine fitting, and even weaving comprise a remarkably small proportion of those who are carpenters, smiths and weavers by caste.

The following conclusions may be drawn from this paragraph and give some indication of the lines on which successful development may be expected; the present tendencies in development will be dealt with in the chapter on occupation.

Industrial development is hampered by the separation of raw material and power. Isolation and enormous freightage encourage manufacture for local markets, but prevent manufacture of bulky articles for export; they encourage partial manufacture of raw materials resulting in diminution of bulk.

The demand for manufactures comes from a desire to employ available capital and organising ability. Labour is not available in large quantities without being drawn from agriculture; some could be rendered available by recruitment from amongst unnecessary middlemen and from amongst the artisan classes whose present work could largely be taken up as supplementary employment by others. The food of both agricultural and industrial population must be produced in the province, and exports must largely consist of food of the same nature. To support industry agriculture must be made to yield more produce per man employed; this must be done, not by ousting wheat, but by growing valuable crops in conjunction with wheat and more especially those which provide labour in those seasons which are now spent by the farmer in idleness.

For the sake of clarity I have treated the desirable changes in agriculture as forming a condition precedent to the establishment of industrialism; but it is clear that these changes and the growth of industrialism should take place concurrently and would then be mutually beneficial.

Note.—I desire to render my acknowledgements to Mr. Calvert from whose "Wealth and Welfare of the Punjab" I have freely drawn in paragraphs 10 and 11.

Section II.—Area, Population and Density.

Actual, resident, normal, and natural population and the population recorded at the Census.

12. The term "population," used alone and without definition, leads to many misunderstandings and it is necessary to lay down early in this report what is meant by the expression when used in it. The simplest meaning and one which I shall call "*actual population*" is the number of persons within the boundaries of a particular place at a particular time.

For statistics which are to form the basis of administration the actual population has disadvantages; for instance a place of pilgrimage may be practically deserted throughout the year and crowded on one day; its actual population at any moment on that day is a useless item of knowledge for those administering it at other times; statistics of actual population are affected by fortuitous movements of the people which upset their normal distribution.

Going to the other extreme we can apply the term population as referring to the number of persons residing in a particular place. Here we are at once confronted with the difficulty of defining residence: but however we define it, we shall not get a satisfactory basis for statistical work; many places habitually contain a large proportion of persons who do not reside in them,—an extreme instance is afforded by the city of London; the administration of such places must provide for these non-residents who, though varying in composition, are always present. It would no doubt be possible to lay down a definition of "*resident population*" which might be of use for special purposes in relation to a small unit, but never one which would apply to a large area; for instance in the Punjab alone there are many persons who are undoubtedly residents of the Punjab but not residents of any particular district.

An indication, but certainly no definition, of what is meant by "*normal population*" is the number of persons within the boundaries of a particular place at a particular time when the conditions affecting the movements of persons in that place and the locality around it are normal. Such a normal population would include a normal number of visitors and exclude a normal number of people temporarily away from the place. Population varies both by reason of migration and by reason of births and deaths; the latter cause of variation is in constant progress and leads to a gradual permanent change, and that change is one which most certainly affects the normal population. Hence the necessity for inserting "at a particular time" in any attempted definition of normal population, a necessity which complicates the process of calculating that population. An average of actual populations, recorded at fixed intervals over a considerable period of time, might be regarded as the normal population for the middle of that period, and provided the period was of sufficient length this method would eliminate the effect of abnormal migrations; but the method assumes that the excess of births over deaths is a regular factor and altogether overlooks the fact that there are seasonal variations in normal populations. Take for instance the case of a hill station which is practically deserted in winter and crowded in summer; such an average of actual populations would not give a normal population for any given time of year.

The term "*natural population*" will be found in various subsidiary tables in this report, it relates to the population which would exist had there been no migration; that is to say it refers to the actual population diminished by the number of persons in the area dealt with who were born outside that area, and increased by the number of persons born in that area but living outside it. Like all adjustments in population statistics it is an approximation; we have no method of ascertaining the total number of emigrants to all parts of the world who are still alive; and in practice the number of those added to the actual population only includes those enumerated at recent censuses elsewhere. However as most of the Punjab emigrants go to other parts of India, where the census was held on the same date as in the Punjab, the error from this source is not great. Apart from this numerical error it is evident that the whole course of the emigrants' lives has been altered by leaving their birth-place, and in particular that their children, being born outside their district of birth, are not reckoned amongst its natural population whilst the children of immigrants are included.

It has been mentioned in the introduction that the final enumeration in connection with this census was carried out between 7 P. M. and midnight on March 18th, 1921; though a preliminary census had been held so as to simplify the work

at the last moment, all entries in the preliminary records which were not in accordance with facts in existence on the census night were deleted. The census figures are therefore, in the main, figures of the actual population on the night of the 18th March; births and deaths which occurred during the five hours the enumeration was in process may or may not have been recognised but the point is of little importance. Some parts of the province were however inaccessible at the time of the census and in these, as explained in the introduction, a census had been carried out in the previous autumn; that census too was one of actual population. Between the autumnal censuses of these inaccessible tracts and the final census in the remainder of the province a certain number of persons must have passed in and out of them; probably very few had gone into them as they are largely deserted during the cold weather even by their residents, and no visitors from outside would willingly visit them before the passes closed and so be shut off from the outside world. Such few persons, if any, who were in them in March but not at the time of the autumn census were not enumerated at all; on the other hand considerable numbers of those enumerated in the autumn had probably brought flocks of sheep and goats over the passes before they closed and spent the cold weather according to their custom as nomadic shepherds in grazing these flocks in the foot-hills and plains. These people would in the ordinary course be enumerated again in March and thus appear twice in the census records, but to prevent this all had been provided when first enumerated with a pass stating the fact, which they were directed to retain and to show to anyone attempting to enumerate them again. The people concerned are illiterate shepherds and it is far more likely that these passes are treasured amongst their possessions as mystic certificates granted for some unknown reason than that they were put to their proper use; however, here too, the numbers concerned are far too small to affect the accuracy of the general census to any appreciable degree even if double enumeration did occur.

The statistics therefore deal with the actual population on the 18th March of the main area of the two provinces, and with the actual population of small portions of the Punjab at different dates in the previous autumn, provision having been made to avoid these overlapping by an endeavour to prevent double enumeration.

The statistics in their final form deal with census units, that is with districts and states, towns and, in the Provincial Tables, with tahsils. Visitors to any of these units are shown amongst the population thereof, whilst residents who were away at the time of enumeration are not shown. People who were enumerated whilst actually travelling are shown amongst the population of the place within the boundaries of which they happened to be at that moment; but in one Table, No. III, they have been shown separately.

13. The Imperial Tables with which this chapter is mainly concerned are the first, which shows the area, number of inhabited houses and the population of all administrative divisions, and the second, which shows the variation in population of these divisions since 1881. Table XI, which gives statistics of birth-place, should also be consulted with reference to movements of the people. The first of the Provincial Tables printed at the end of Part II of the report gives for tahsils the same details that Imperial Table I gives for districts and states. In addition seven subsidiary tables dealing with points discussed in this chapter are printed at the end of it.

Reference
to Statistical
Tables.

The areas quoted for districts and states are those of the most recent survey conducted by the Survey of India Department, adjusted for subsequent changes in boundaries; but it should be noted that survey figures are not available for tahsils and other small units and that figures for these have been taken from the revenue records. Throughout this report survey figures will be quoted wherever available, and in other cases the less accurate revenue record figures will be given.

14. The area and population of the Punjab, with its political divisions,

	Area in square miles.	Population.
Punjab ..	136,905	25,101,060
British Territory	99,846	20,685,024
Punjab States	37,059	4,416,036
(A) ..	5,8	408,019
(B) ..	31,2	4,008,017
Delhi ..		488,188

and Delhi are given in the margin. The Punjab as a whole exceeds the British Isles in area by about one-eighth and its population amounts to nearly two-thirds that of England and Wales; the population of the British Territory included in it is comparable with that of Spain though it is contained in an area not much greater than

Area and
Population.

half of that country. The Punjab States in the aggregate exceed Ireland in area by about one-sixth and have much the same population; the recent administrative change which has been effected since the census places the principal Punjab States, with a population of just over four millions, in direct political relationship with the Government of India and leaves a number of small states with a total population of only just over four hundred thousand under the political control of the Punjab Government.

The population of the Punjab is compared with that of the largest provinces

Province.	Population.		
	British Territory.	States.	Total.
Madras	42,319	5,460	47,779
Bengal	46,695	897	47,592
United Provinces	45,376	1,135	46,511
Bihar and Orissa	34,002	3,960	37,962
Bombay	19,348	7,410	26,758
Punjab	20,685	4,416	25,101

Note.—000's omitted.

in India in the marginal table and it will be seen that the province ranks sixth in respect of total population, whilst if British Territory alone be considered it takes the fifth place on the list. Delhi with its population of 488,188 comes at the other end of the list of Indian provinces, of which it is the smallest both as regards area and population.

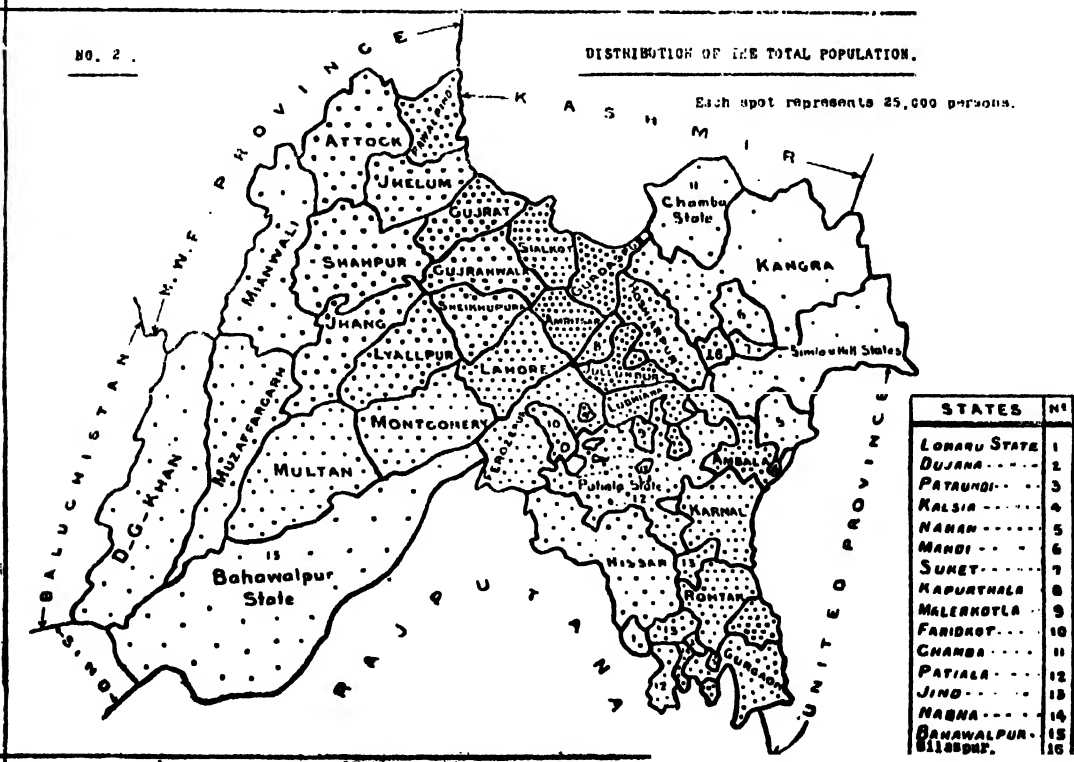
Natural Division.	Area.	Population.
Indo-Gangetic Plain, West ..	39,296	11,446,716
Himalayan	22,050	1,737,801
Sub-Himalayan	19,478	5,838,869
North-West Dry Area ..	56,081	6,077,674

The areas and population of the four natural divisions of the Punjab are shown in the margin; they contribute 46, 7, 23 and 24 per cent. of the total population respectively.

Population of Administrative Divisions.

15. Of the five divisions into which the twenty-nine districts of the Punjab are grouped for administrative purposes, the largest is Multan with an area of 31,207 square miles, whilst Lahore, with very nearly five million inhabitants, ranks first in population.

Amongst districts, Kangra with an area of 9,978 square miles is by far the most extensive; but it includes much uninhabited mountainous country and only ranks fourteenth in respect of population. Lahore District with 1,131,336 persons heads the list in respect of numbers; Simla with 45,327 persons and an area of only 101 square miles is the smallest district in both respects.



situated in the less densely populated regions ; for instance the Bahawalpur State, the Simla Hill States and Chamba, which between them cover nearly two-thirds of the area occupied by the Punjab States, happen to be in the extreme south-west and north-east which are the two most sparsely populated tracts in the province.

The density is compared with that in other Provinces and States in India in the margin ; it will be seen that the

British Territory.			States.		
India	..	226	India	..	101
Delhi	..	823	United Provinces	..	191
Bengal	..	808	Bengal	..	165
United Provinces	..	426	Punjab	..	119
Bihar and Orissa	..	409	North-West Frontier	..	111
Madras	..	297	Rajputana	..	76
Punjab	..	207	Kashmir	..	39
Ajmer-Merwara	..	183	Baluchistan	..	5
N.-W. F. Province	..	168			
Bombay	..	157			
Assam	..	143			
Central Provinces	..	139			

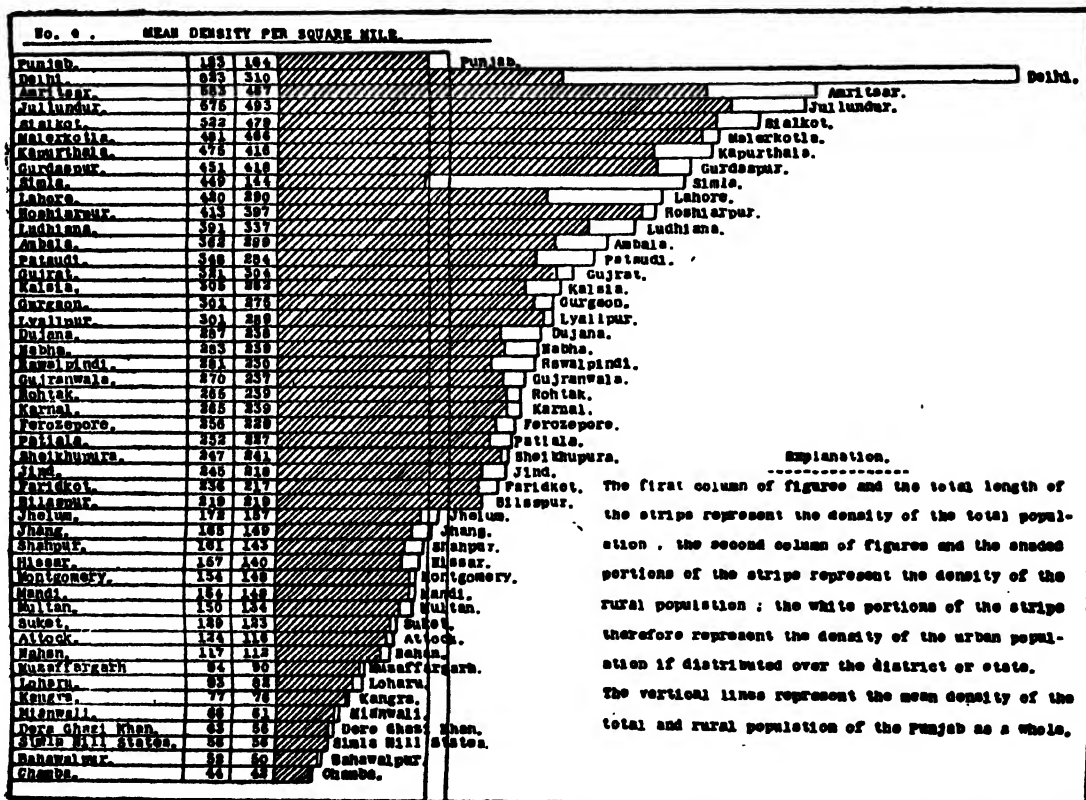
eastern half of India is the most densely populated and that the density decreases from north to south ; though the west is less thickly populated throughout it shows the same general feature of a diminishing density from north to south.

It should be noted that whilst the thickly populated United Provinces

adjoin the Punjab on the east, the other three sides of the province are bounded by Rajputana, Baluchistan, the North-West Frontier Province, and Kashmir which are amongst the most deserted parts of the whole of the Indian continent.

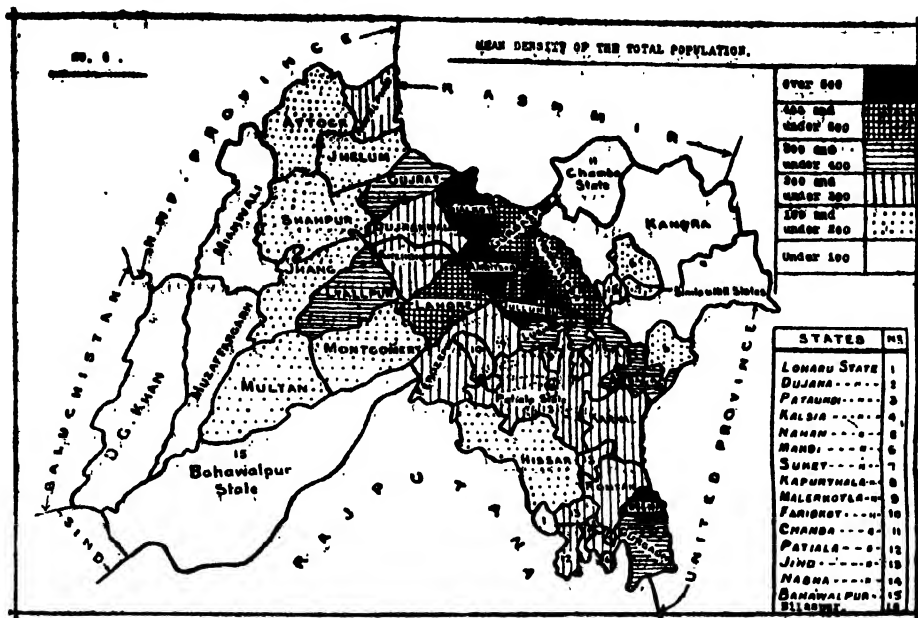
Density in Districts and States.

17. Diagram No. 2, though designed to show the distribution of population, also forms a rough visual guide to the density, for the proximity of the spots representing units of 25,000 persons is in direct relation to density. Diagram No. 5 however shows the same thing in a more usual way though it is inferior in that it does not show minor differences of density ; the actual figures for density are given in diagram No. 4 in which districts and states have been arranged



in order according to the density of the total population. Delhi comes at the head of the list, but this is purely owing to the artificial nature of its constitution ; omitting the urban area the density of its countryside is very close to that of the neighbouring tracts of Gurgaon, Rohtak and Jind which appear a long way down the list. The greatest density is found in the next ten districts and states on the list, and the map shows that all these are contiguous ; with the exception of Lahore they all lie in or alongside the sub-montane tract, where rainfall is comparatively heavy and the sub-soil water level is high. The solitary exception of Lahore, which lies further from the hills, is not in reality an exception to

the generalisation that the most heavily populated tract lies at the foot of the hills, for the density of this particular district is due, like that of Delhi, to the inclusion of a large urban area in its midst.



This group of densely populated districts is situated then in one of the most fertile parts of the province; other very fertile parts depend on canal irrigation for their fertility to an extent which this does not; hence whilst this region may not now-a-days be strikingly more fertile than others, it undoubtedly has been so in the past; the denseness of its population can therefore be ascribed at once to its capability of supporting a heavy population. The next twelve districts and states on the list, with the one exception of Lyallpur, all lie in two well-defined areas; firstly the remainder of the sub-montane strip, and secondly the south-east corner of the province. At one end of the sub-montane strip come Ambala and Kalsia, at the other Gujranwala, Gujrat, and Rawalpindi. Why should not these have populations rivalling that in the first group of districts? And why should Jhelum, which lies in their midst, come so far below them again? Ambala and Kalsia, though close to the hills and possessing an abundant rainfall, are less fortunately situated as regards rivers than the tract to their west and in consequence the level of the sub-soil water is lower; irrigation from wells is difficult and there is practically no canal irrigation. Gujranwala spreads well beyond the sub-montane tract, and only a small portion of it has the characteristics of that tract; the remainder is largely irrigated from canals, parts of which are of recent construction. Jhelum and Rawalpindi lie in a part of the sub-montane tract where the country is broken by outlying hills and is much less fertile than that to the east. It is not surprising that these come well below the rest of the sub-montane tract in their ability to support a large population, and when it is noticed that Rawalpindi owes its position in the list very largely to its urban population it becomes evident that here again density bears a direct relation to agricultural resources. Gujrat is a level tract and its natural characteristics lie between those of Sialkot and Jhelum. Taking the whole strip of sub-montane country from Ambala to Rawalpindi, it would appear that density is directly dependent on agricultural conditions; so closely dependent in fact that it seems probable that the law of diminishing returns has come into operation.

Turning now to the south-east corner of the province, where the density is comparable with that in the less favoured parts of the sub-montane tract, we find Gurgaon, Dujana, Nabha, Rohtak, Karnal, Ferozepore, Patiala, Jind and Faridkot, which all lie in one block, with a very even density; these all lie in the Indo-Gangetic Plain and conditions in them are similar; Loharu and Hissar however, which lie near them, have a much less dense population; this is natural for they border on the desert country of Rajputana and have little irrigation. Part of Ferozepore resembles Hissar, but there is much canal irrigation and this

has been sufficiently long established to have made its effect felt through many generations; forty years ago the density in Ferozepore was less than that of any district in this tract except Hissar. Lahore by nature is more closely connected with this tract than with the sub-montane tract, and its rural population does not show a much greater density. This block of country is so nearly homogeneous as regards agricultural conditions, and population is spread so evenly through it, that here again we are drawn to the irresistible conclusion that pressure of population on produce must be the determining factor in the density.

By arranging all the units in this area according to density of rural population, as in the margin, several points, tending to confirm this conclusion, are brought out. Delhi's rural population lives in the immediate vicinity of a city and this always makes for intensive cultivation and heavy population. The rural area of Lahore is affected in the same way, and in addition is far more widely irrigated than any other in the tract. Pataudi and Gurgaon both carry a heavier population than the average of the tract, but in both there is a tendency for it to decline, and, as will be seen in the paragraph on the agricultural conditions of the decade, the pinch of poverty is more often felt here than elsewhere in the province. Next comes a group in which the density is practically identical and lastly come two units where it is much lower; in these two however we are faced with a rapid expansion of population in the last forty years. 19, 1920

The remaining units on the list attached to diagram No. 4 lie either in the western plains or in the Himalayan region; there is no possible connection between the two, though it happens that they are intermingled when arranged in order of density; these are separated and the density of their rural populations is shown in the margin. In the western plains the density varies enormously; as regards soil and climate, these plains are fairly homogeneous, but their cultivation depends almost entirely on irrigation. The units at the head of the list are copiously irrigated and have been colonised by government agency; the population in all these irrigated units is increasing by leaps and bounds and nowhere shows any sign of having reached a state of equilibrium. Here then although density has no connection with the theory of diminishing returns yet it is directly connected with agricultural conditions for the present rapid increase is entirely due to increased fertility; but as there is as yet no pressure on resources it does not vary in direct proportion to fertility. The units at the lower end of the list consist of wide stretches of dry plain in which no cultivation is possible without irrigation; in them cultivation is confined to specially favoured plots in which inundation or laborious well-irrigation renders it practicable; the population may be near the maximum that the present agriculture can support, but the advent of canal irrigation would immediately alter the position. Further discussion of the density in these western plains is best left to later paragraphs concerning movements of the population, for there is nothing static in the present conditions and the present density is merely a stage in a continuous movement.

In the Himalayan tract the relative density of the different units is absolutely traceable to their distance from the outer edge of the hills; Bilaspur, which adjoins Hoshiarpur and nowhere penetrates far into the hills, has the greatest density; next come Mandi, Suket and Nahan which lie further in but do not run up on to the higher ranges; and lastly come Kangra, the Simla Hill States and Chamba, in which the sparseness of population is in direct ratio to the proportion of the total area which lies in and behind the main ranges.

The only district which has not been dealt with as part of a distinct tract is Attock; this, if regarded as part of the Sub-Himalayan Division, shows a remarkably low density, but it has none of the natural characteristics of that division;

Delhi	..	..	310
Lahore	..	..	290
Pataudi	..	..	284
Gurgaon	..	..	275
Karnal	..	..	239
Rohtak	..	..	239
Nabha	..	..	239
Dujana	..	..	238
Ferozepore	..	..	229
Patiala	..	..	227
Jind	..	..	218
Faridkot	..	..	217
Hissar	..	..	140
Loharu	..	..	82

Western Plains.

Lyallpur	..	289
Sheikhupura	..	241
Jhang	..	149
Montgomery	..	148
Shahpur	..	143
Multan	..	134
Muzaffargarh	..	90
Mianwali	..	61
D. G. Khan	..	56
Bahawalpur	..	50

Himalayan Tract.

Bilaspur	..	219
Mandi	..	148
Suket	..	123
Nahan	..	112
Kangra	..	76
Simla Hill States	..	56
Chamba	..	42

it lies largely amongst arid dry hills in an inhospitable country, and forms no exception to the rule formulated below.

To sum up, density varies everywhere in accordance with agricultural resources to the exclusion of all other factors; it is so directly proportionate that the conclusion that there is pressure on these resources is irresistible; yet this same direct proportion also indicates that other factors have not yet been brought into play and hence that the pressure on resources is not extreme, for in that case industrialism would have been forced into existence and would have led to variations in density independent of agriculture. An exception to the rule exists in the irrigated portions of the western plain where population is rapidly increasing and as yet has received no check by its pressure on resources; whilst the beginnings of more acute pressure are observable in the extreme east of the province where there is a steady decline in population in Ambala and Gurgaon, and a diminishing rate of increase in other districts.

18. In discussing the distribution of the total population in the preceding paragraph it has been impossible to avoid some reference to the incidence of the rural part of the population; in this paragraph the distribution of the rural population will be discussed in greater detail with a view to discovering its relation to agricultural conditions. The discussion will be limited to British territory so as to avoid basing arguments on the incomplete and, in some cases, unreliable agricultural statistics which are all that are available for the states. Suffice it to say that an examination of such figures as are available reveals no peculiar points in connection with any of the states, all of which appear to resemble adjoining British districts in regard to the matters which will come under discussion.

Density of Rural Population and its relation to Agricultural Conditions.

In any tract which is entirely self-supporting and has no imports and exports the presence of a town would create a drain on the produce raised and thus lessen the amount available for the rural population; in such tracts it would be natural to discuss the relation between total population and agricultural conditions. But the Punjab is not such a tract; its communications are sufficient to ensure that the needs of a town are ultimately met from produce raised in distant parts of the country; here the presence of a town affords a market for the produce of the vicinity and increases the value of agricultural lands by encouraging intensive cultivation which necessitates a denser agricultural population. Of two equal areas of land of equal quality that which is nearer a town is more productive; its owner adopts more intensive systems of farming so as to supply the town with produce of high value and obtains part of his own food by purchase, and in doing this he benefits because the money value of that food is raised on a smaller area than would be required to raise the food itself. As a plot of land will maintain its owner in greater affluence if it be situated near a town, it follows that it will support a larger rural population than a similar area in the depths of the country.

Hence before we can examine the relationship between density and cultivation, we must exclude the urban part of the population; and, even after we have done this, we may expect a greater density of the remaining rural population in such districts as contain large urban communities.

It may be argued that, though agricultural land in the neighbourhood of a town demands a dense *agricultural* population, it may not support such a dense *rural* population as that which is able to supply its needs from the town and is therefore not allied with such a large supplementary population of artisans and petty traders. This argument is not applicable to the Punjab where it is well known that villages in the neighbourhood of towns have just as many menials, artisans and petty shopkeepers as those elsewhere.

If we omit the urban population from our statistics the density in the British territory of the Punjab drops at once from 207 to 185 persons per square mile. In England and Wales, by omitting the population of all urban areas with a population of five thousand or more persons, the density drops from 649 to 172 persons per square mile. This fact assists us in visualising the distribution of rural population over the Punjab countryside, but it forms the basis of no comparison for the rural population of England is not primarily dependent on the produce of the tracts in which it lives.

Diagram No. 5, in the previous paragraph, shows the density of the rural population as well as of the total population, but the former is in an inconvenient form and the figures are repeated in the margin with the districts arranged according to the density of the rural population.

	Density of rural population in British Territory per square mile.	Percentage of net cultivated to total area, 1921.
Punjab	185	40
Jullundur	493	70
Sialkot	479	70
Amritsar	467	70
Gurdaspur	418	64
Hoshiarpur	397	48
Ludhiana	337	75
Delhi	310	56
Gujrat	304	54
Ambala	299	57
Lahore	290	61
Lyalpur	289	69
Gurgaon	275	68
Sheikhupura	241	48
Rohtak	239	60
Karnal	239	49
Gujranwala	237	53
Rawalpindi	230	40
Ferozepore	229	77
Jhelum	157	35
Jhang	149	31
Montgomery	148	34
Simla	144	15
Shahpur	143	39
Hissar	140	71
Multan	134	30
Attock	116	34
Muzaffargarh	90	16
Dera Ghazi Khan	79	16
Kangra	76	8
Mianwali	61	17

There is practically no manufacture outside the towns and there is very little room for error in assuming that the rural population is entirely supported by local agriculture; by this I do not mean that its food, clothes and other requirements are produced locally, but that its only primary source of wealth is the local agricultural produce and all its requirements are satisfied by that wealth.

A comparison of the two columns of figures shows at once that, with very few exceptions, density follows *extent* of cultivation; and, further, that variations in density are greater than variations in the extent of cultivation. We can therefore lay down the two following principles as being of general, though not universal, application:—*density of rural population*

primarily depends on the proportion of land which is cultivated, and density increases at a greater rate than that proportion. The latter principle admits of two explanations; it may be due to the Malthusian theory of diminishing returns which postulates that an increase in population leads to a disproportionately small increase in resources and therefore leads to a reduced standard of living; or, it may be due to the fact that the actual cultivation in tracts which are capable of wide cultivation is superior in quality as well as quantity.

Probably both explanations are partly true; for instance, there can be no doubt that the cultivation in Jullundur, in addition to being more thickly distributed, is very far superior in quality to that of Dera Ghazi Khan; yet it is possible that the extension of cultivation in the former district has been pushed to such limits that the poorest land under cultivation is inferior to land which may be left uncultivated in the latter.

More detailed comparison of the two columns of figures reveals the following exceptions to the general rule:—Hoshiarpur, Sheikhupura, Simla and Kangra are far more densely populated than other districts with similar proportions of cultivation, and on the other hand Ludhiana, Ferozepore and Hissar vary in the opposite direction.

In Sheikhupura there has been much colonisation in the last few years and the cultivated area is in the process of very rapid extension.

Simla and Kangra lie in the Himalayan tract; they and the states which adjoin them all have large areas of waste which is not unproductive and numbers of people earn or supplement their income by collecting wood and forest produce or by grazing herds and flocks in these wastes. In this tract the underlying assumption that the rural population is dependent on local agriculture is incorrect. To a far less degree the same remarks apply to Hoshiarpur. In Simla a large proportion of the inhabitants make a living by supplying the transport necessary to the existence of the summer capital in their neighbourhood; and in both Kangra and Hoshiarpur an exceptionally large number of persons earn their living in the army and in domestic service throughout the length and breadth of the province.

Ferozepore and Hissar lie on the borders of Rajputana and much of their land is of poor sandy quality in which the cultivated area is devoted to raising crops of low value; the sparseness of their population may be ascribed in the main

to the inferiority of their cultivation, but at the same time it must be noted that the population of these two districts (especially that of Ferozepore) has been increasing since 1881 at a far greater rate than in any other districts of the Eastern Punjab. We may conclude that in these two districts, whilst the quality of the soil precludes a dense population, the present density is exceptionally light and leaves room for future increase. The case of Ludhiana does not admit of such obvious explanation and must be left for discussion till a further stage has been reached in the analysis of the statistics.

Having established these principles, the next step is obviously to exclude

INCIDENCE OF THE RURAL POPULATION PER SQUARE MILE ON

Net cultivated area of 1921.			Average area of matured crops.		
Punjab	..	460	Punjab	..	513
Kangra	..	984	Simla	..	928
Simla	..	972	Hoshiarpur	..	805
Hoshiarpur	..	831	Kangra	..	749
Jullundur	..	701	Gujrat	..	664
Sialkot	..	682	Sialkot	..	648
Amritsar	..	670	Jullundur	..	636
Gurdaaspur	..	652	Rawalpindi	..	633
Rawalpindi	..	578	Gurdaaspur	..	617
Muzaffargarh	..	568	Montgomery	..	583
Gujrat	..	559	Amritsar	..	581
Delhi	..	562	Muzaffargarh	..	562
Ambala	..	522	Karnal	..	556
Sheikhupura	..	499	Multan	..	546
Dera Ghazi Khan	..	490	Ambala	..	538
Karnal	..	486	Gurgaon	..	523
Jhang	..	482	Jhelum	..	507
Lahore	..	472	Rohtak	..	496
Ludhiana	..	448	Jhang	..	476
Gujranwala	..	443	Ludhiana	..	468
Jhelum	..	443	Dera Ghazi Khan	..	462
Multan	..	442	Lahore	..	458
Montgomery	..	430	Attock	..	437
Lyallpur	..	417	Mianwali	..	412
Gurgaon	..	407	Lyallpur	..	406
Rohtak	..	398	Shahpur	..	406
Shahpur	..	365	Ferozepore	..	370
Mianwali	..	361	Hissar	..	306
Attock	..	340			
Ferozepore	..	297			
Hissar	..	196			

pura were not available and these districts have been omitted from the second set of figures. The first thing to notice is that the first set of figures gives the incidence on cultivated area without making any allowance for its quality, and hence affords data from which to discover the extent to which density on cultivation varies with the quality of that cultivation.

Only one feature of the quality of agricultural land—namely the area of matured crops it produces—is capable of quantitative measurement; the second set of figures shows the incidence after this has been eliminated. If we had reliable figures for yields for each district and could combine them so as to get average yields for all crops, we could then carry the process a step further and by calculating the incidence of rural population on actual produce we should see at once the extent to which pressure on subsistence is present in each district; failing this the incidence on matured area gives some indication of that pressure though it is affected by the differences in yields for which allowance must be made before any conclusions can be drawn.

I shall now examine the first column of figures in an attempt to trace if any connection exists between incidence of rural population and the quality of agricultural land. It has already been stated that cultivation in the Punjab is affected more by rainfall and irrigation than by difference in soil, and I shall endeavour to trace the connection between density and these factors, first, by considering *rainfall* in districts where the irrigation is similar and, second, by considering *irrigation* in districts where the rainfall is similar.

Turning to the statistics for irrigation given in paragraph 8 it is seen that, out of the twenty-eight districts there mentioned, twelve have less than 28 per cent. of their crops irrigated, seven have between 36 and 54 per cent. and nine have over 70 per cent. irrigated.

the waste and to calculate the incidence of the rural population on the cultivation. This has been done in two ways and the results are shown in the margin; in the first the incidence is calculated on the area of land under cultivation, in the second upon the area of matured crops. The basis of the two sets of figures are given by the net cultivated area of 1921 and the average of the matured areas recorded in the nine years 1912-13 to 1920-21; the latter period was chosen as it eliminates the complication due to the changes in the Delhi boundaries which took place before 1912-13; unfortunately separate statistics for matured areas in Delhi, Gujranwala and Sheikhupura were not available and these districts have been omitted from the second set of figures.

Taking the first group of twelve districts, which have little irrigation,

Districts with less than 28 per cent. irrigated.	Incidence.	Rainfall.	Irrigation.
Kangra	984	74	63
Simla	972	63	0
Hoshiarpur	831	35	11
Gurdaspur	652	34	28
Rawalpindi	538	32	2
Ambala	522	32	6
Jhelum	443	26	5
Gurgaon	407	25	17
Rohtak	398	20	27
Attock	340	20	9
Mianwali	361	12	12
Hissar	196	16	16

and arranging them in order of incidence on cultivated area, we get the figures reproduced in the margin. With the solitary exception of Hissar the incidence varies throughout according to the rainfall, and the extent of irrigation appears to have no appreciable effect. The exceptional case of Hissar has already been explained and these figures support the explanation given.

We can now enunciate another principle ;—*in tracts with less than one-third of the cultivation irrigated, the incidence of population on cultivated area is primarily determined by the rainfall.*

Treating the next group of seven districts, with moderate irrigation facilities,

Districts with from 36 to 54 per cent. irrigated.	Incidence.	Rainfall.	Irrigation.	Well irrigation.
Jullundur	701	27	54	54
Sialkot	682	32	53	48
Gujrat	559	26	36	15
D. G. Khan	490	6	43	11
Karnal	486	30	36	14
Ludhiana	448	26	37	28
Ferozepore	297	20	46	14

in the same way we get the marginal table which, though it is not so strikingly convincing as that which preceded it, will yet be found to support the following principle :—*where irrigation extends to more than one-third of the cultivation, but not less than one-half, the incidence on cultivation depends primarily on the extent of irrigation but is also affected by great*

differences in rainfall. Here again an exception to a general rule is afforded by Ferozepore, the light density in which has already been explained.

The remaining districts, which have more than 70 per cent. of their matured

Districts with over 70 per cent. irrigated.	Incidence.	Rainfall.	Canal irrigation.	Well irrigation.
Amritsar	670	24	40	30
Muzaffargarh	568	6	53	24
Jhang	482	10	58	28
Lahore	472	18	56	22
Gujranwala	443	23	55	21
Multan	442	7	73	14
Montgomery	430	10	64	23
Lyallpur	417	13	97	1
Shahpur	365	15	64	11

crops irrigated, when arranged in the same way, show that, *where irrigation is widely extended, the rainfall becomes a negligible factor in regard to its effect on density.* The figures also indicate that the extent of well irrigation is a more important factor than the extent of irrigation from canals. The significance of the figures is somewhat obscured by the fact that Lahore, Montgomery, Lyallpur and Shahpur are all districts in which population

has increased by over 10 per cent. in the last decade and is obviously not in a static condition, so that in them density cannot be expected to be fully influenced by agricultural conditions. In fact the figures indicate that Lyallpur and Shahpur are lightly populated in comparison with other districts, and that in them further large increases may reasonably be anticipated.

By grouping districts according to rainfall and examining the effect of rainfall

	Incidence.	Irrigation.	Rainfall.
Rainfall over 30 inches—			
Kangra	984	20	74
Simla	972	0	63
Hoshiarpur	931	11	35
Sialkot	682	53	32
Gurdaspur	652	28	34
Rawalpindi	578	2	32
Ambala	522	6	32
Karnal	486	36	30
Rainfall between 20 and 30 inches—			
Jullundur	701	54	27
Amritsar	670	70	24
Gujrat	559	36	26
Delhi	552	23	28
Ludhiana	448	37	26
Gujranwala	443	76	23
Jhelum	443	5	26
Gurgaon	407	17	25
Rohatak	398	27	20
Attock	340	9	20
Ferozepore	297	46	20
Rainfall less than 20 inches—			
Muzaffargarh	568	77	6
Sheikhupura	499	76	15
Dera Ghazi Khan	490	43	6
Jhang	482	86	10
Lahore	472	78	18
Multan	442	87	7
Montgomery	430	87	10
Lyallpur	417	98	13
Shahpur	365	75	15
Mianwali	361	12	12
Hissar	196	16	16

and irrigation on density of population within these groups, though we cover much the same ground and arrive at many of the same conclusions we are able to throw a little further light on the subject. This converse process is shown in the margin, and tends to establish the following principles:—*where the rainfall exceeds 30 inches per annum it outweighs other factors in determining density of population over cultivation; where it lies between 20 and 30 inches it is still the main factor, but very large differences in the extent of irrigation also have a considerable effect; where it is less than 20 inches it ceases to have any appreciable effect.*

We can now examine the figures for incidence on matured areas which, as already explained, eliminate part of the variations due to differences in quality of land, and tend to reflect pressure on resources, this tendency being partially obscured by the fact that differences in yields have not been eliminated. The list of districts is headed by Simla—where there are 928 members of the rural

population to every square mile of matured area, which allows just over two-thirds of an acre of matured crops per head—and runs down to Hissar in which there is an average of just over two acres of matured crops to each person. It includes districts in which conditions are obviously exceptional, and it will simplify the examination to exclude these at once. We have already seen that Simla, Hoshiarpur and Kangra form such exceptions, for in them the rural community has extensive resources in addition to those afforded by agriculture whilst even so the inhabitants resort to outside service in very large numbers indicating that the present resources of the districts are insufficient to support the population; a view which is supported by the fact that in Kangra and Hoshiarpur the rural population has only increased by five per cent. in forty years whilst in Simla it has declined by four per cent. in the same period.

Montgomery, too, is a district that must be removed from the list because it owes its position in it to fortuitous circumstances; the matured area based on an average of nine past years gives very misleading results in a district where large areas have been irrigated, colonised and brought under cultivation in the last few years. On general grounds it is probable that this district is very far from being in the congested state suggested by the figures; like other newly colonised tracts the areas allotted are more than sufficient to support the colonists and for many years the newly broken soil will probably yield increasing returns and enable the population to expand rapidly without detriment to the general standards of prosperity and comfort.

At the lower end of the list Lahore, Lyallpur, Shahpur and Ferozepore are all districts in which population has been increasing very rapidly during the last decade, whilst in Hissar population has been increasing steadily since 1881. This fact, taken together with their low position on the list, indicates very clearly that there is little pressure on resources and that further increase in population may be anticipated without anxiety. At the same time it must be noted that the very low figures for Ferozepore and Hissar are partly due to the presence of poor soil and that the capacity for increase is not nearly so large as the bare figures indicate; this is particularly true in Hissar where absence of irrigation and a light rainfall render the crops peculiarly liable to disastrous failure; under present economic conditions a district where the crops fluctuate excessively cannot support nearly

so many people as a district in which the crops maintain the same average without much variation from year to year.

By the omission of the nine districts mentioned the list is reduced to a form in which it is far more suitable for comparative purposes; it now includes districts in which the incidence lies between 664 and 412 persons to the square mile; or in which the average matured area per head varies between 0·96 and 1·55 acres, a difference which could easily be obliterated by differences in yields; this being so it is obviously wrong to jump to the conclusion that there is greater pressure on agricultural resources in districts at the head of the list than in those at the bottom; we have, in fact, come to the point where figures fail us and quantitative analysis must yield to general considerations based on local knowledge.

The list showing incidence of rural population on matured area, in its reduced form, together with a few leading statistics for each district is reproduced below—

	Incidence of rural population on matured area.	Rainfall in inches.	Percentage of canal irrigation.	Percentage of well irrigation.	Percentage of area under wheat.	Percentage of area under pulses.	Gain per mile by migration inside the Province.	Increase per cent. in population, 1911—1921.	Increase per cent. in population, 1881—1921.
Gujrat	664	28	21	15	40	8	—48	5	13
Sialkot	648	32	5	48	43	2	—178	1	0
Jullundur	636	27	0	54	34	11	—136	2	4
Rawalpindi	633	32	0	2	42	1	24	4	21
Gurdaspur	617	34	11	17	35	5	—93	2	3
Amritsar	581	24	40	30	33	10	—113	5	4
Muzaffargarh	562	6	53	24	45	7	—4	0	29
Karnal	556	30	22	14	20	18	2	3	—3
Multan	546	7	73	14	39	4	63	9	60
Ambala	538	32	0	6	27	8	—59	—1	—8
Gurgaon	523	25	6	11	7	17	—83	—7	—10
Jhelum	507	26	0	5	49	4	—68	—7	—3
Rohatak	496	20	19	8	10	20	—5	8	4
Jhang	476	10	58	28	45	5	—112	9	46
Ludhiana	468	26	9	28	27	20	—34	10	—8
Dera Ghazi Khan	462	6	32	11	32	4	—19	—7	28
Attock	437	20	1	8	48	8	—15	—1	15
Mianwali	412	12	5	7	35	28	—35	5	37

Probably Jullundur has the richest cultivation of any district in the province; it possesses an ample rainfall, excellent soil, very extended well irrigation, splendid marketing facilities, and an agricultural population largely composed of castes which supply the best and most intensive farmers known in the Punjab. Sialkot resembles it very closely, but does not have quite such good marketing facilities and raises a larger area of wheat and a smaller area of crops of "market garden" variety.

Gurdaspur and Amritsar are situated in the same fertile tract; the former is differentiated by a heavier rainfall and less irrigation, the latter by the existence of much canal irrigation which is unfortunately accompanied by waterlogging; their slight inferiority in the way of natural advantages is certainly more than counterbalanced by the lesser incidence of their rural population.

These four districts stand apart from the rest of those on the list by reason of the excellence of their agricultural conditions, and their position near the head of the list does not necessarily indicate undue pressure on resources, though it leads us to look for indications of its existence in other directions; evidence of its existence is afforded by the fact that population has remained practically stationary for over forty years, and that at the present time there is a marked balance of emigration over immigration. As regards natural advantages these districts may perhaps be graded in the order Jullundur, Sialkot, Amritsar, Gurdaspur which is not the same as the order in which they appear in the list and we may conclude that the margin of surplus is less in Sialkot than Jullundur, and less in Gurdaspur than Amritsar.

The natural advantages in Gujrat are certainly less than in the four districts mentioned above, yet its rural population has a smaller relative area of

crops ; there can be little doubt that pressure of population is very severe in this district. The recent opening of the Upper Jhelum Canal has improved the conditions and will continue to do so ; until the district has had time to settle down under the new conditions it is not possible to estimate their effect. It may safely be asserted that Gujrat has become dangerously congested, but that the situation may be saved by the new canal ; even with the amelioration in conditions which will be caused by the new irrigation it is unlikely that the district will support a considerably greater population than that already in existence.

In the Sub-Himalayan tract and west of the foregoing districts lie Jhelum, Rawalpindi and Attock ; in respect of irrigation and composition of their crops these three districts are remarkably similar and all are characterised by the presence of low hills containing much unfertile land. In respect of population they are remarkably dissimilar, yet Rawalpindi with the highest incidence shows a tendency to increase whilst the others do not. Rainfall amounts to 32 inches in Rawalpindi, 26 inches in Jhelum and 20 inches in Attock ; the forests of Rawalpindi form an asset of the rural population in addition to its crops ; easily accessible irrigated lands in Shahpur and in the colonies to the south have attracted many emigrants from Jhelum for several generations past. These facts help to explain the large differences in density but it is still impossible to avoid the conclusion that Rawalpindi is far more congested than the province as a whole, that Attock supports far fewer people than it is capable of doing, and that the declining population of Jhelum is not caused by pressure on resources.

Proceeding down the list we come to Muzaffargarh which adjoins Jhang and Multan and resembles them in many of its agricultural aspects. The incidence on matured crops is 562, whilst it is 546 in Multan and only 476 in Jhang. These three districts have low rainfall and copious irrigation ; in all there has been a very great increase in population since 1881, and in all that increase has followed extensions of irrigation. The extensions in Muzaffargarh are of less recent date than in the others, and it has had more time for population to adjust itself to existing conditions ; in it a definite check has recently occurred in the increase of the inhabitants. In Multan and Jhang the increase has been greater and is still continuing at a rapid rate ; a very slight check has occurred in Jhang owing to the fact that attractive employment in new colonies has drawn away some of the people who, though quite well off in their own districts, saw chance of improving their position by migration. We may conclude that Muzaffargarh is nearing the point when production limits population, though there is certainly no indication that pressure on resources is unduly heavy ; and also that Multan and Jhang have not reached that point ; everything points to the conclusion that Multan and Jhang are lightly populated and may expect to see a further rapid increase.

Ludhiana, Ambala, Karnal, Rohtak and Gurgaon all lie in the eastern plains and have many characteristics in common ; it will be convenient to discuss them together. The presence of light sandy soil is reflected by the statistics quoted which show that the proportion of wheat is far lower than anywhere else in the province ; it is replaced by pulses and inferior crops to which the soil is more suited ; this inferiority gets more marked from north to south which is the order in which the districts have been mentioned. The figures for incidence on crops vary from 556 in Karnal to 468 in Ludhiana ; they are too near those for the rich tracts round Jullundur to reflect the enormous difference in the quality of crops ; they are at much the same pitch as in the extensive tracts of rich irrigation to the west which are undoubtedly fit to support a greater density than these eastern plains. In short, they indicate that the whole of this eastern tract is overcrowded ; which indication is supported by the facts that except in Karnal and Rohtak there is great loss of population by migration to other parts of the province, and that except in Rohtak there has been an universal decline in population since 1881.

In these districts agricultural and political conditions have remained unchanged for a great many years ; here, if anywhere in the province, population might be expected to have adjusted itself to conditions. In one way this expectation is realised for in the tract as a whole population appears to have approached nearer the limit of resources than elsewhere in the province ; in another way the

expectation is completely falsified, for the variation in density as between the districts shows no relationship with the variations in their resources. One explanation accounts for both these points;—the inhabitants are Hindus of a less enterprising nature than the Sikhs who live east of them; affection for their ancestral lands, strong throughout the province, is perhaps strongest here; they have submitted to straitened conditions without an effort to escape from them by seeking permanent employment elsewhere, and though there is emigration it is mainly local; the only extensive movements to Lyallpur and other canal colonies have been from Ambala and Ludhiana. This one feature accounts for the tract having become overcrowded as a whole, and also accounts for the overcrowding being markedly different from district to district.

It has already been indicated that the order Ludhiana, Ambala, Karnal, Rohtak, Gurgaon, is one of diminishing quality of the soil; Ambala has the heaviest rainfall but practically no irrigation; Ludhiana and Karnal with rainfalls not far below that of Ambala have 37 and 36 per cent. of their crops under irrigation, but the former district is more favoured than the latter by reason of the greater extent of well irrigation; in respect of natural advantages Ludhiana is better off than Karnal which is again better off than Ambala. Gurgaon and Rohtak have less rain and less irrigation than either Ludhiana or Karnal, and both grow much less wheat; the heavier rainfall in Gurgaon is offset by more extensive irrigation in Rohtak; on the whole there is little to choose between the two though probably advantages in the soil give Rohtak a stronger position than Gurgaon. It is difficult to know how to place Ambala with respect to these two; it excels in soil and climate but has practically no irrigation.

Arranging these five districts in the order of their natural advantages, or, in other words, in the order of their capacity to support population, and noting the actual incidence of population on crops in each, we get the surprising result shown in the margin. Ludhiana with the greatest capacity supports the least people, whilst throughout there is no relation between the burden of population and the capacity to bear it. We may conclude that the pressure on resources is heaviest in Gurgaon and not much less severe in Ambala and Karnal, whilst in Ludhiana it is very much less than in any other of the five districts. This conclusion is supported by the fact that the population of Gurgaon and Ambala has rapidly fallen off since 1881 to an extent which is not accounted for by migration. The decrease in the same period in Ludhiana does not affect the conclusion as it all occurred in one decade and was due to epidemics of plague. Loss by migration is also heaviest in Ambala, Gurgaon and Ludhiana; in Ludhiana the inference raised by the loss by migration is partly nullified by the fact that the inhabitants are less conservative than in the other four districts, and that a greater proportion of them received grants of land during the colonisation of Lyallpur.

The only districts not yet discussed are Dera Ghazi Khan and Mianwali which appear at the end of the list; Mianwali, with little rain and scarcely any irrigation, appears to be in the position on the list which its natural disadvantages render appropriate, and the figures give no indication as to whether there is or is not any considerable pressure on resources. Dera Ghazi Khan also appears to occupy a position warranted by its circumstances, though a comparison with the much more heavily populated districts of Multan and Muzaffargarh—than which it has much less irrigation—tends to show that there is room for expansion.

The principles, and the particular local points, which this lengthy paragraph tends to establish, may be summed up as follows:—

Towns may create a drain on the agricultural resources of the province but within districts their existence tends to enable the countryside to support a heavier rural population.

Density of rural population depends primarily on the proportion of the land cultivated, and secondly on rainfall and irrigation.

Where rainfall is under twenty inches per annum, density on cultivation depends entirely on irrigation; where it is over thirty inches, entirely on rainfall.

Conversely where less than one-third of the cultivation is irrigated, the incidence of population on cultivation depends on rainfall; where over two-thirds is irrigated, irrigation is the determining factor.

Quality of soil only finds third place in the factors affecting density, and is practically without effect except in the south-east of the province.

In general the existing distribution of population is in very close agreement with these principles; so close that as a general proposition it may be asserted that the population throughout the province has approached sufficiently near the limit of resources to render that limit operative in determining density.

At the same time minor differences of distribution occur which are not in accordance with the present extent of resources, and these minor differences indicate that the various districts may be grouped as follows :—

- (1) Districts where there is severe pressure on resources—
Kangra, Hoshiarpur, Simla, Gurgaon, Ambala and Gujrat.
- (2) Districts where the pressure is felt but in a less degree—
Karnal, Rohtak, Rawalpindi, Sialkot, Jullundur, Amritsar, Gurdaspur, Ludhiana and, probably, Gujranwala and Delhi.
- (3) Districts where the population is suitable to the resources available—
Mianwali, Jhelum, Muzaffargarh and, probably, Dera Ghazi Khan.
- (4) Districts where resources could support a greater population without detriment to its welfare—
Ferozepore, Hissar and Attock.
- (5) Districts which are under-populated—
Montgomery, Lahore, Lyallpur, Shahpur, Multan, Jhang and, probably, Sheikhupura.

It must be noted that this grouping is arranged for *present* conditions, indicating the position at the moment; it does not allow for future changes in conditions, such as probable extensions of irrigation and cultivation. It is difficult to assign positions to Gujranwala and Sheikhupura on account of the absence of separate statistics and they have been placed in groups containing adjoining and similar districts.

Section III.—Variation in Population at Previous Censuses

19. The Punjab stands at the ancient gateway of India and through it have passed the successive swarms of immigrants and invaders who were the progenitors of by far the greater part of the present population of the Indian continent. The Aryans, the Scythians, the Greek armies under Alexander, and the long succession of Mohammadan raiders and conquerors have all swept across its plains and have all left their mark on the province and the great country beyond it. History.

In it the Hindu religion had its birth and in it the most ancient sacred books of that faith were written; one of the greatest characters in the history of Buddhism was born in the province; but the Buddhist faith has practically disappeared, whilst the centres of Hindu learning and culture have been driven eastwards before the Musalman invaders who left behind many settlers of their faith and forced that faith upon a large number of the earlier inhabitants. The Punjab also is the home of the Sikh religion, which, starting as a peaceable revolt against the complexities and Brahmanical subjection of Hinduism, developed under Mohammadan oppression into a military and political organisation. Musalmans now compose 51 per cent. of the population whilst Hindus have declined in numbers till they only include 35 per cent. and from amongst them have arisen the Sikhs of whom 12 per cent. of the population is composed.

Throughout its history the Punjab had been the scene of constant violence and bloodshed which culminated in the 18th century in an orgy of rapine and wild disorder; early in that century the Sikhs, with their rising military power, raided and ravaged the eastern parts of the province and extended their exactions to the central and northern tracts; their depredations were followed by the invasion of Nadir Shah, the Persian, who swept through the Punjab destroying and laying waste, and the desolation was completed by a series of great famines which occurred in the middle of the century. Thereafter the country was the scene of constant invasions by the Duranis from the west and of struggles for supremacy between the Sikhs and Mahrattas; in the middle of fifty years of bloodshed and disorder the countryside was again desolated by a terrible famine in 1783.

At the beginning of the next century some measure of peace was restored owing to the rise in supremacy of the great Sikh leader Maharaja Ranjit Singh, whilst in 1803 the British became masters of the territory now roughly included

in the districts of Delhi, Gurgaon, Hissar, Rohtak and Karnal and also extended their protection to the States in the eastern part of the Province. Famine and fever however waged constant warfare against the population during this comparatively settled period. After Ranjit Singh's death a state of anarchy arose which constantly threatened the peace of the British borders and led to the first Sikh war which ended in March 1846 and resulted in the occupation of Lahore and the cession of the Jullundur Doab to the British; two years later insurrections in the south-west led to the second Sikh war and the establishment of British rule throughout the province.

The country was suffering the natural effects of centuries of warfare and violence; a harrowing picture of the conditions which prevailed occupies several pages of Mr. Ibbetson's Census Report of 1881. The south-eastern districts of the province, ravaged in turn by Sikh and Mahratta, were desolated; each group of villages was at deadly enmity with its neighbours, and much of the countryside was practically a desert inhabited only by a few tribes of marauding nomads. The hill country, which had long been suffering under local strife, had been overrun by the Gurkhas before the Sikhs gained supremacy; the desolation caused by the Gurkhas was little relieved by peace under the Sikh Government which forcibly collected a revenue which impoverished the people and left them scarcely sufficient for the barest existence. In the west the Sikh rule had had least hold and the country was in a violent state of disorder; might was right, local leaders were in constant warfare and every second or third year the country was invaded by Sikh armies who laid it waste with all the excesses natural when wild and uncultured men are let loose amongst their hereditary religious enemies.

In the centre and south-west the Sikh rule was stronger and more equitable but, though some approach to government was maintained, the main object was to wring from the cultivators the last farthing which could be extracted without compelling them to abandon their fields. The Sikhs promoted and extended cultivation as far as possible under a system which held forth the minimum of inducement to the cultivator, but they respected no rights and recognised no property when such respect or recognition conflicted with their pecuniary interests.

Little wonder that the peace and security afforded by the British administration, combined with government activity in developing and improving the resources of the country, led to material progress at a rate which elsewhere would be little short of miraculous. It is this material progress, hampered at first by recurring famines and always by disease, that has most affected the spread of population, and the account of the Punjab since it came under British rule may be confined to these subjects.

The progress made during the last ten years is detailed at some length in Section IV of this Chapter and it is unnecessary to deal with it here. Figures illustrating the development of the province from 1863 to 1911 are given in the following table; these have been taken from past Census Reports and other sources; in compiling the table it was found that figures obtained from different sources varied considerably and those which have been entered cannot be verified as accurate though they are quite near enough to illustrate all that is required of them. In some cases the figures do not refer to the actual year recorded above them, but to a preceding or following year; no attempt has been made to adjust the figures for subsequent changes of boundaries and they all refer to the province as it existed in the year under which they are entered:—

	1863.	1868.	1881.	1891.	1901.	1911.
Cultivated area. Square miles	..	31,513	36,756	40,424	43,587	46,325
Irrigated area. Square miles	..	9,350	11,170	11,899	14,650	15,536
Irrigated by State Canals	1,195	1,758	2,364	3,868	6,631	9,753
Metalled Roads. Miles	..	859	1,467	2,239	1,932	2,558
Railways. Miles	32	293	1,056	1,821	4,264	5,369
Number of Schools	..	1,806	2,098	9,640	7,479	7,278
Number of scholars in thousands	..	72	168	246	259	347
Number of literate per mille—						
Males	..	..	47	61	65	63
Females	..	..	1	2	3	6
Exports in lakhs—Maunds	..	..	103	160	249	506
Rupees	..	..	373	694	1,150	2,686
Imports in lakhs—Maunds	..	..	63	122	251	551
Rupees	..	..	710	920	1,546	2,994
Price of wheat, in rupees per maund	1-2-9	2-2-7	2-3-5	2-1-8	2-6-0	2-12-0

The railway mileage for 1901 and 1911 is that recorded in the Census Report of 1911, but in the Punjab Administration Report for 1911-12 the total railway mileage was shown as 4,043 miles; apparently the latter figure only relates to the North-Western Railway.

The growth of cultivation, irrigation, communications and export, whilst adding to the prosperity of the people, have been the great safeguards against famine which has become of less and less frequent occurrence as the country has been developed; the most severe famines which have occurred since annexation are noted below—

- 1851-52. Drought almost amounting to famine.
- 1860. Severe famine throughout the country east of the Sutlej; the price of wheat in Delhi rose from 24 to 8 seers per rupee within 12 months. Government relief was organised on a large scale in Rohtak and Karnal and neighbouring districts.
- 1868-69. A far more severe famine in the same part of the country, government relief was given freely, over ten million daily rations were distributed but even so death from starvation was considerable. Fever, cholera and small-pox followed in the wake.
- 1877-78. Drought almost amounting to famine, accompanied by unprecedented cattle mortality.
- 1897. Scarcity throughout the province, severe in the south-east but scarcely amounting to famine.
- 1900. Severe scarcity approaching to famine conditions in the south-east.
- 1901-02. Famine in Hissar, a small amount of relief being necessitated.
- 1905. Scarcity in the south-east, famine relief works opened in Gurgaon.
- 1908. Famine conditions reappeared in Hissar and Gurgaon.
- 1911. Fodder scarcity.
- 1913. Fodder scarcity in the south-east.
- 1916. Scarcity not accompanied by famine in the south-east.
- 1919. Scarcity conditions in the Ambala Division and in Dera Ghazi Khan.
- 1920-21. An exceptionally bad year, necessitating remissions and suspensions of revenue and the granting of concession rates for carriage of fodder. No famine occurred, test relief works were opened in Hissar but proved unnecessary.

It may be said that no disastrous famine has occurred since 1868; scarcity conditions in recent years have never produced famines; the agricultural conditions which prevailed in 1920-21 were such as would have led to severe famine fifty years before, but the establishment of a normal surplus of produce and the existence of a good system of railway communication sufficed to ward off famine without the help of government relief works.

It will be noticed that the south-east of the province has suffered most on every occasion of scarcity, and this fact adds weight to the quantitative analysis of agricultural conditions which has been set out in paragraph 18.

Deaths have been registered in the Punjab since 1867 and births since 1880;

the system of registration is not such as to ensure that all the occurrences are recorded, but it has undergone steady improvement, so that the earlier figures on record are probably much below the truth. The recorded birth and death-rates for the inter-censal periods are given in the margin and according to them the excess of births over deaths was greatest in the period 1881 to 1900 and was nearly equalled in the last decade. Since 1880, when births were first recorded, the number of deaths has exceeded the number of births in eleven out of the forty-one years. These exceptionally unhealthy years, with the birth and death-rates recorded in them, are shown below—

Period.	Rate per mille.		Birth-rate.	Loss per mille.	Chief cause.
	Births.	Deaths.			
1868-1880	.. ..	25	39	8	Fever.
1881-1890	.. 39	31	38	11	Fever.
1891-1900	.. 41	33	41	7	Plague.
1901-1910	.. 41	44	35	1	Plague.
1911-1920	.. 44	37	44	..	Plague.
					Plague and fever.
					Plague.
					Plague.
					Plague.
					Plague.
					Fever.
					Influenza.

The ravages of plague for twenty years, and particularly between 1900 and 1907, constituted the most serious drain which the province has had to face since

it entered upon a peaceful history; it is to be hoped that the enormous death-roll of 1907 marked the culmination of its attacks, and that the comparative freedom which has since been enjoyed may continue. The whole period that plague has been present in India has been one of continuous research and effort on the part of the medical profession; knowledge of the disease and its causes has made great headway and, which is more important still, the people in general have learnt the simpler precautions which should be taken against it and have outgrown their earlier prejudices against those precautions.

All previous figures for mortality have been slight compared with those of the year 1918 when the country was paralysed by the influenza scourge, an account of which will be found in a subsequent paragraph. Had it not been for this visitation the last decade would have been the healthiest on record; the average death-rate, omitting 1918, was only 31·6, and though the rates recorded for the period 1868—1890 were less than this the improvement in registration must outweigh the recorded difference; on the other hand the birth-rate of 44 for the last decade is the highest on record in the province.

Past Censuses. 20. The census with which this report is concerned is the seventh taken in the Punjab. The census of 1881 was conducted with far greater detail and accuracy than the two which preceded it and is the first for which the majority of the statistics can be compared with those of later date. Since then a census has been held every ten years; the administration of each has been founded on that of the preceding one and the experience gained on each occasion has resulted in all probability in each census being a little more thorough in its administrative details and accurate in its statistical results. The dates of these censuses with the name of the officer deputed to superintend the operations and the territory concerned are noted below—

Date.	Superintendent.	Territory.
1st January 1855	.. Sir Donald McLeod	.. British Territory only; including the present Punjab and the North-West Frontier Province but omitting Delhi, Hissar, Rohtak, Gurgaon, and part of Karnal.
10th January 1868	.. Mr. A. Roberts	.. British Territory only; including the present North-West Frontier Province, Punjab and Delhi.
17th February 1881	.. Mr. D. J. Ibbetson	.. British Territory and the Punjab States, the former including the same territory as in 1868.
26th February 1891	.. Mr. E. D. MacLagan	.. The same territory as in 1881.
1st March 1901	.. Mr. H. A. Rose	.. The same territory as in 1891 but with separate statistics for (1) the Punjab including Delhi and (2) the North-West Frontier Province.
10th March 1911	.. Pandit Hari Kishen Kaul, R.E., C.I.E.	.. The Punjab including Delhi and the Punjab States.
18th March 1921	.. Mr. L. Middleton	.. The present Punjab and Punjab States with separate statistics for Delhi.

The following account of the territorial changes which have occurred since 1855 will be of assistance if this report is compared with those of past censuses:—In 1855 the Punjab did not include Hissar, Rohtak, Gurgaon, Karnal, Simla, Sheikhpura, Attock, Mianwali, Montgomery, Lyallpur and Muzaffargarh as separate districts, but did include Thanesar, Gugera, Leiah, Khangarh, Dera Ismail Khan, Peshawar and Kohat which no longer appear amongst its administrative units.

Between 1855 and 1868 Hissar, Rohtak, Gurgaon, Karnal and Sirsa were added by transfer from the old North-West Provinces; Thanesar was abolished as a district and its area distributed between Ambala and Karnal; Simla was recognised as a district and its administration separated from that of the surrounding Hill States. The new districts of Muzaffargarh, Montgomery and Bannu were created by rearrangement of the boundaries of Khangarh, Leiah, Gugera and Dera Ismail Khan and the first three of these ceased to be districts.

No changes of importance occurred between 1868 and 1881, but between 1881 and 1891 Sirsa was abolished and its area distributed between Ferozepore and Hissar.

In 1901 Mianwali was formed out of parts of Bannu and Dera Ismail Khan ; Rawalpindi was increased at the expense of Hazara ; and the districts of Peshawar and Kohat, with the remaining portions of Hazara, Bannu and Dera Ismail Khan, were removed from the province to form the new North-West Frontier Province.

In 1904 a new district of Attock was formed from parts of Rawalpindi and Jhelum, and in the same year Lyallpur was formed from parts of Jhang, Montgomery and Gujranwala. In 1909 and 1910 Muzaffargarh and Gujranwala were enlarged at the expense of Mianwali and Lahore respectively.

Changes which have occurred since 1911 are given in detail in paragraphs 2 and 3 of this chapter, and complete the history of the growth of the present limits of the Punjab and Delhi Provinces.

In addition to the changes in territory which are noted above many minor changes in boundaries, both internal and external, have occurred between the various census dates ; the tables prepared at the present census show figures for 1881 and onwards, accurately adjusted for all such changes, but contain no reference to the statistics of 1855 and 1868. It is now extremely difficult to adjust the figures of these two censuses so as to apply to existing administrative divisions, but the following attempt supplies a few leading statistics which may be accepted as approximately correct. The 1855 census showed 12,717,821 persons as enumerated in British Territory ; Mr. Ibbetson worked out the 1855 population of that territory, together with that of the south-eastern districts which had been incorporated in the Punjab after 1855, at 15,161,321 persons, a figure which was also accepted by Mr. Maclagan. This figure however includes 1,209,736 persons in the districts which have gone into the North-West Frontier Province ; of these about 218,000 were in what is now Mianwali and 991,736 in the area now lost to the Punjab ; hence the 1855 population of the present Punjab and Delhi was about 14,169,585 persons. Of these about 597,440 were in the old Delhi District and of these again about 325,405 were in that part of the old Delhi District which now forms Delhi Province.

At the time of the 1855 census a careful estimate of the population of the Punjab States was prepared and that part of it connected with the present Punjab States amounted to 3,750,606 persons.

The 1868 census resulted in the enumeration of 17,611,498 persons, and minor territorial changes led Mr. Ibbetson and Mr. Maclagan to take 17,609,518 as the figure to compare with those for 1881 and 1891. This figure includes 1,718,200 persons residing in the old districts of Dera Ismail Khan, Bannu, Peshawar, Kohat and Hazara ; of these about 239,000 were in the area now known as Mianwali and the remaining 1,479,200 in the area since transferred to the North-West Frontier Province. Hence the 1868 population of the present Punjab and Delhi was about 16,130,318 and of these 608,850 were in the old Delhi District and of these again about 331,619 in the part of it which is now included in the new province of Delhi. We can now compare the total population at all seven censuses as follows :—

Year.	Present Punjab.	Punjab States.	Present Delhi.
1855 ..	13,844,180	3,750,606	325,405
1868 ..	15,798,699		331,619
1881 ..	16,938,910	3,861,853	350,499
1891 ..	18,652,202	4,263,280	372,766
1901 ..	19,942,327	4,424,398	405,409
1911 ..	19,578,573	4,212,794	413,447
1921 ..	20,685,024	4,416,036	498,188

21. Accepting the figures given at the end of the last paragraph the annual rates of increase per cent. since the first census was taken have been as shown in the margin. Fluctuations in Population 1855-1901.

Years.	PUNJAB.		Delhi.
	British Territory.	States.	
1855-1868 ..	1·09 }	0·11	{ 0·15 0·44
1868-1881 ..	0·56 }		
1881-1891 ..	1·01	1·04	0·74
1891-1901 ..	0·69	0·38	0·88
1901-1911 ..	-0·18	-0·48	0·20
1911-1921 ..	0·57	0·48	1·81

It is possible that the increased accuracy of records at each census, at any rate up to 1891, accounted for an appreciable amount of the apparent increase and, if this is so, the actual rate of increase has been more steady than that shown by the figures.

The period between the censuses of 1855 and 1868, though it witnessed the mutiny, was one of extreme quiet and great progress compared with the times which had preceded it. The 1868 census report estimates that the cultivated area

increased by nearly 32 per cent. in the thirteen years; the only perennial canal which was open at the time of annexation was the Western Jumna which then irrigated some 625 square miles in Karnal and Delhi; by 1868 it was irrigating 750 square miles whilst 470 more were irrigated by the Upper Bari Doab which had then been open for eight years; inundation canals irrigated rather over 500 square miles at annexation and 800 by 1868. Between 1855 and 1868 the number of miles of railway open to traffic rose from 32 to 468;* and in the latter year there were 760 miles of telegraph line in operation and an annual delivery of ten million letters within the province.

This peace and progress was naturally favourable to the increase of population and, though there was a severe famine in 1860, it is not surprising that the annual rate of increase which amounted to 1·09 in British Territory should be higher than any that has been recorded since.

In the 1891 report it will be seen that the increase between 1855 and 1868 is given as 16·1 per cent. and that there was difficulty in accounting for this great increase. Possibly much of it was fictitious and due to incomplete enumeration in 1855 in the wilder districts now included in the North-West Frontier Province; the omission of that area from the figures reduces the increase to 14·1 per cent. which is not improbably great.

The next inter-censal period was one of even more marked peace and progress; great attention was paid to the construction of metalled roads and railways, the length of which had risen by 1,881 to 1467 and 1,056 miles respectively; the number of patients treated annually in government dispensaries rose from 471 to 1,368 thousand; the number of school-children more than doubled, and the post and telegraph services were enormously improved. But the initial bound with which the people of the province had recovered after their long existence amidst anarchy and oppression had reached the top of its trajectory in 1868 and thereafter was losing momentum; cultivation increased by only 17 per cent., extension of canals progressed somewhat less rapidly than before and the irrigated area rose by only 19 per cent.; the increase in population was only half that in the previous period and was at the annual rate of 0·56 per cent.; it is probable however that the rate was greater than this up to 1878 after which followed three years of scarcity and sickness.

It is useless to discuss the rate of increase in population in the Punjab States previous to 1881 for the only record of that population is given by the estimate prepared in 1855 which did not rest on actual enumeration.

During the decade ending in 1891 the increase in population was again rapid and at the average rate of 1·01 per cent. per annum; the aggregate increase of 10·1 per cent. was only accompanied by an increase of just under 10 per cent. in the area under cultivation, and, though the area irrigated by State canals rose by 64 per cent., the increase in irrigation of all sorts was very slight.

The rapid increase in population occurring in conjunction with a diminution in the rate of extension of cultivation is all the more surprising when it is noted that the recorded death-rate was 31 per *mille* as against 25 per *mille* in the previous period, and that in the year before the census was taken it rose to 39 per *mille* and was largely in excess of the birth-rate. It is true that material progress other than agricultural had been rapid, but this has little immediate effect on population, and the only circumstances in which the decade appears to have been more favourable than the previous period was the total absence of famine. The Census Report of 1891 ascribes the rapid increase entirely to this one feature and supports this theory by comparative examination of the rates of increase in different tracts.

The average rate of increase in the Punjab States was 1·04 per cent. as compared with 1·01 in British Territory, whilst the balance of migration during the period was from the States to British Territory; if this migration be eliminated the annual rates come to 0·99 and 1·11 respectively. A large portion of the population of the States lives in the south-east of the province which had always been the part most affected by scarcity and famine; in a period in which population increased rapidly on account of freedom from scarcity it is natural to expect the greatest increase in the tracts previously most liable to scarcity. A comparison of the figures for States with those of adjacent districts shows

* The railway mileage of 1868 is shown as 293 in the Census Report of 1891 and as 468 in that of 1891; departmental reports show that 410 miles were open in 1872.

that the greater increase was due to accident of position and not to any peculiar difference between the States and British Territory.

The next ten years were marked by much extension of canal irrigation and the foundation of the first of the great canal colonies. The area irrigated by State canals increased by 71 per cent. and the total amount of irrigation by 25 per cent.; but on the other hand the extension of cultivation was practically confined to the newly irrigated colony lands and the total increase amounted to less than 8 per cent.

The limits of cultivation were being approached in the long settled tracts, and whilst famine was ceasing to be a deciding factor in spread of population its place was being taken by density and pressure on resources.

There was no actual famine during the decade but great scarcity prevailed more than once in the south-eastern districts, yet communications and distribution had so improved that this scarcity did not affect the numbers of the population and in these districts the increase was not less than in those which did not suffer.

Both the death and birth-rates showed an increase over those for the previous decade, partly due no doubt to more complete registration, but the excess of the latter over the former remained the same; there were however two bad years, 1892 and 1900, in which the deaths largely outnumbered births and the period cannot be described as healthy. It was in this decade that plague first made its appearance and commenced its long and bitter warfare against the health of the province.

With increasing density and a less rapid extension of cultivation a diminution in the rate of increase of population was natural and the drop in that rate to 0·89 per annum is fully accounted for by these factors.

The rate of increase in State Territory was 0·38 per annum, but part of the difference was due to migration from the States to British Territory, and if this be eliminated the rates of increase for British and State Territory come to 0·67 and 0·46 respectively. Except in Patiala, where the increase was much less than in adjoining British districts, the detailed figures are very similar for states and districts which lie near each other.

We can sum up the principal factors in the variation in population in the four inter-censal periods which have been discussed as follows:—

- 1855-68. A period of resilient recovery from oppression, enabling a depleted population to increase at a rate impossible under normal conditions.
- 1868-81. A period starting under more normal conditions allowing less but yet ample room for increase and therefore showing a declining rate, the decline in the rate being intensified by scarcity and disease in the last few years.
- 1881-91. A decade free from scarcity and famine which allowed a rapid increase in a country not yet fully populated.
- 1891-1901. A decade in which pressure on resources began to be felt and in which extension of cultivation was almost entirely confined to tracts opened up by new canals. Colonisation was as yet so recent as to have led to no appreciable increase in population as a result of relief of pressure. Health conditions somewhat adverse.

Though these may be the principal factors it must be realised that no summing up can attempt to do more than indicate a few which stand out amongst the multitude of conditions and fortuitous events which affect the growth of population.

22. In connection with changes in population the decade 1901-11 was marked by one overwhelming feature rendering all others in- significant in comparison, this was the terrible prevalence of disease; fever, to which the greatest mortality in the province is invariably due, was more widespread and fatal than ever and was accompanied by epidemics of plague of great violence. The crude birth and death-rates for each year of the decade are shown in the margin and

Year.	DEATH-RATE FROM			Birth-rate.
	All causes.	Fever.	Plague.	
1901 ..	35	25	1	35
1902 ..	44	24	9	44
1903 ..	49	25	10	42
1904 ..	49	19	20	42
1905 ..	47	19	17	44
1906 ..	38	20	5	44
1907 ..	61	20	30	40
1908 ..	50	35	2	42
1909 ..	31	21	2	35
1910 ..	33	17	7	42
1901-10 ..	44	23	10	41

Variations in the Decade 1901-1911.

Year.	DEATH-RATE FROM			Birth-rate.
	All causes.	Fever.	Plague.	
1896-1890 ..	25	16	..	..
1891-1899 ..	31	..	..	39
1891-1900 ..	33	23	..	41
1911-1920 ..	37	23	3	44

have a normal, the normal death-rate from fever may be placed at about 18; this normal was exceeded in every year of the decade except the last and the rate rose to an unprecedented height in 1908. Plague was unknown in the Punjab before 1896 and recent experience leads to the hope that it reached its maximum intensity during the decade and may eventually disappear; every part of the province except the dry tracts in the west and the hill districts in the north-east suffered severely; one of its worst features was that it caused a greater mortality amongst females than males and thereby accentuated the disparity between the sexes which has always been a feature of the Punjab, and hence not only reduced the population but affected it in such a way as to lower its reproductive capacity.

In every year of the decade except 1906, 1909 and 1910 more deaths were registered than births, and for the whole decade the vital statistics, which are reproduced in the margin, showed an excess of deaths over births amounting to 557,447 in British Territory alone; but, owing to migration and other disturbing causes, the census results showed an increase		
1901-10.	Males.	Females.
Deaths ..	4,459,990	4,383,718
Births ..	4,340,338	3,945,923
Difference ..	119,652	437,795

of 46,672 males and a decrease of only 402,979 females resulting in a total decrease of about 355 thousand. This decrease amounted to 1·8 per cent. of the 1901 population and was accompanied by a decrease of over 211 thousand or 4·8 per cent. in the Punjab States, the most important of which are situated in the tracts most affected by the epidemics; the decrease in the Punjab as a whole amounted to 2 per cent. and was accompanied by a decline from 854 to 817 in the number of females to a thousand males.

In the middle of this period of disease and death occurred the terrible earthquake of 1905 which was felt almost throughout the province and was most intense in the western parts of the Kangra District; in the zone of greatest destruction this earthquake caused over 20,000 deaths amongst a population estimated at about 375,000.

As a result of government activities material progress, though necessarily hampered by the unfavourable health conditions, was very great. Irrigation from government canals was extended rapidly; the Lower Jhelum Canal was opened in 1901 and by 1910 had brought water to 1,166 square miles of previously unirrigated land; the area irrigated from the Lower Chenab was increased by 602 square miles; 1,105 miles of new railway routes were opened, the most important being those serving the new canal colonies; the post and telegraph services were extended and improved.

Colonisation of the dry areas brought under canal irrigation was pushed on throughout the decade and, after the abnormal health conditions, formed the most important factor in the growth and movement of population. Whilst the population of the Indo-Gangetic plain and of the Sub-Himalayan area dropped by 8·9 and 5·9 per cent. respectively and whilst that of the hill tract only increased by 2·0 per cent. there was an increase of no less than 17·8 per cent. in the North-West Dry Area which includes these colonies; this was due both to immigration and to partial immunity from plague; the increase of 655,551 persons was accompanied by an excess of births over deaths amounting to 440,648 and more than one-eighth of the population were recorded as immigrants from elsewhere at the census of 1911.

The colonisation, being entirely provincial, had no direct effect upon the total population of the province, but indirectly, by transferring persons from

compared with those for other census periods; in comparing these it should be noted that by omitting the totally exceptional year 1918 from the decade 1911-20 the death-rate from fever is reduced to 18 and the total death-rate to 32.

As far as any violently fluctuating quantity can be said to

congested to sparsely populated tracts, it must have encouraged its growth; by chance it also encouraged its growth by removing persons from districts which were afterwards most affected by disease to tracts where it was less severe. It is impossible to isolate the various factors affecting the growth of colony population, but that the "natural increase" is accelerated in the newly colonised regions appears to be indisputable from a consideration of the position of the Lyallpur District, which consists entirely of canal colony, in the following groups selected from the census statistics of 1911—

- (a) Districts in which the greatest increase in population occurred between 1901 and 1911—
Lyallpur 45·5 per cent., Shahpur 29·8 per cent., Jhang 21·1 per cent., Multan 14·7 per cent.
- (b) Districts in which the proportion of immigrants per *mille* of total population was greatest in 1911—
Lyallpur 660, Delhi 245, Shahpur 211, Lahore 211.
- (c) Districts in which the birth-rates were highest in the decade 1901-10—Jhang 78, Gujranwala 48, Lyallpur 47, Sialkot 46.
- (d) Districts in which the death-rates were lowest in the decade 1901-10—
Dera Ghazi Khan 25, Lyallpur 26, Mianwali 29.
- (e) Districts in which the proportion of children under ten years of age to persons between 15 and 40 years of age was highest in 1911—
Mianwali 50, Lyallpur 85, Montgomery 84, Jhang 83.
- (f) Districts in which the proportion of children under ten years of age to married women between 15 and 40 years of age was highest in 1911—

Lyallpur 229, Montgomery 227, Mianwali 222, Jhang 220.

That Lyallpur comes very near the head of a list of twenty-eight districts (Simla has been omitted as being abnormal) in lists *c*, *d*, *e* and *f* indicates very clearly that in colony tracts the reproductive power of the

*Increase per cent. in Lyallpur
by age-groups.*

Total	..	..	8·3
0—10	..	..	21·3
10—15	..	..	0·6
15—40	..	..	3·2
40—60	..	..	2·1
60 and over	..	..	10·3

population is higher than elsewhere; allowance must be made for the facts that plague was not so prevalent in Lyallpur as in many districts, that colonists include many of the most virile of the population, and that the proportion of aged persons amongst them is small; but on the other hand the colonisation of Lyallpur had mainly taken place before 1901 and

the marginal figures show that most of the increase during the decade was by natural reproduction and not by the immigration of persons in the middle periods of life.

The fact that the Shahpur District which may be taken as typical of the new Jhelum Colony, appears high up in lists *a* and *b* but not in *c*, *d*, *e* and *f* confirms the general conclusion; that district was so newly colonised in 1911 that the population had not had time to show the effect of the new conditions in which it lived. It can be concluded that in the decade 1891-1900 the colonisation of the Chenab Colony effected a movement of population but had not begun to affect the increase of population, and that in the decade 1901-10 the Jhelum Colony showed the same feature whilst the Chenab Colony was beginning to take effect on the increase of population whilst losing its influence on the movement thereof.

The result of a declining population in a province which was beginning to feel the effect of density of population in its settled tracts, associated with Government extension of irrigation facilities, is illustrated by the curious figures for extension of cultivation and irrigation shown below—

	AREA IN SQUARE MILES IN		INCREASE IN THE DECADE 1900-1910.	
	1900.	1910.	Total.	Per cent.
Irrigated from State canals	6,631	9,753	3,122	47
Irrigated from private canals	1,287	808	—485	—38
Irrigated from wells	6,492	4,665	—1,827	—28
Irrigated from other sources	240	316	—76	—32
Total irrigated area	14,650	15,536	886	6
Cultivated area	43,587	46,325	2,738	6

The increase in area irrigated through government agency was almost nullified by the decline in other sorts of irrigation.

The new canal irrigation was largely in tracts which had previously been unculturable (we have already noted that the Lower Jhelum Canal irrigated 1,166 square miles and that that of the Lower Chenab was extended by 602 square miles, all of which had been practically desert waste before), and hence was necessarily associated with new cultivation; yet the total increase in cultivated area was less than the increase in area irrigated by State canals, showing that, outside the colonies, cultivation must have remained practically stationary.

The figures suggest two rather contradictory conclusions;—that diminution of labour by disease and emigration resulted in contraction of effort, and that cultivation in the old districts had already been extended so far that it could go no further; the first indicates a body of labour only just sufficient to cultivate the land, the second indicates a pressure of population on resources. The history of previous periods however all goes to show that the latter is the correct inference, and the former may be largely discounted on the ground that 1900 was an exceptionally dry year in which all wells were worked to their utmost capacity.

The public health and agricultural progress of the decade form gloomy subjects, and it is a relief to turn to the brighter picture afforded by the economic aspect of the peoples' life and the extension in trade and industrial effort.

The harvests of the decade were, on the whole, above average, prices fluctuated considerably but showed a marked rise above those of previous periods; wages rose practically in proportion to prices, so that consumers did not suffer whilst producers flourished. The position of the agricultural community was strengthened by the passing of the Land Alienation Act of 1901 and at the same time a growing interest in co-operative credit societies which sprang up in districts scattered throughout the province led to a great improvement in the economic position of those who joined them.

The average wages of agricultural labourers and of artisans in towns are shown in the inset table and compared with the average price of wheat; there being no material on which to base an index number, the purchasing power of

Year.	Price of wheat per maund.	AVERAGE MONTHLY WAGES.			
		Agricultural.		Urban (artisans).	
		Rupees.	Maunds of wheat.	Rupees.	Maunds of wheat.
	Rs. a. p.	Rs. a. p.		Rs. a. p.	
1901	2 8 0	7 7 0	2.98	18 0 0	7.20
1902	2 4 0	7 11 0	3.42	19 8 0	8.26
1903	2 4 0	6 12 0	3.00	18 4 0	8.11
1904	2 0 0	7 8 0	3.33	18 2 0	8.06
1905	2 8 0	7 2 0	2.85	21 4 0	8.50
1906	2 8 0	8 4 0	3.30	22 8 0	9.00
1907	2 12 0	9 14 0	3.59	24 0 0	8.73
1908	4 0 0	10 3 0	2.55	30 14 0	7.73
1909	3 12 0	10 7 0	2.78	27 0 0	7.20

wages has been shown in wheat which, being a common food and a staple which tends to regulate the price of a large number of other commodities, helps to indicate the real fluctuations in wages.

The number of factories employing twenty or more operatives rose from 132 in 1900 to 443 in 1911; both the volume and value of imports and exports was more than doubled in the decade; towards the latter end of the decade there was a boom in company promoting, and although most of the companies were unsound or even fraudulent their flotation showed the growth of a more enterprising spirit amongst those with capital and indicated that there was scope for more healthy enterprises.

Section IV.—The Conditions of the Decade 1911-21.

23. The decade opened in hopeful circumstances ; two years had gone by in which the general health had been good and promised a freedom from the epidemics and heavy mortality which had marked the previous eight years ; a succession of satisfactory harvests, high prices for produce accompanied by a rise in wages sufficient to cover that rise, and a rapidly increasing export and import trade had left both the agricultural and trading communities in a condition of prosperity ; the presence of capital and a desire to utilise it was indicated by the rapid expansion of joint-stock enterprise, and a real step forward in industry had been taken and had resulted in the number of factories doubling within the space of ten years. The terrible wave of disease had left a diminished population with a reduced capacity for reproduction, but on the other hand had been most severe in the more densely populated tracts and had helped to equalise the distribution of the people ; the opening of canals in the deserts of the west and the colonisation of the areas commanded by them had gone far to relieve the pressure in the districts from which the colonists had been drawn, whilst in those parts which had been first colonised the population was increasing rapidly and exhibited a marked increase in vitality. General.

Unfortunately the first autumn crop of the decade was a bad one, but it was succeeded by a good crop in the following spring, so that on the whole the first year was an average one ; it was succeeded by two years of fair harvests and the fourth year of the decade 1914-15 produced bumper crops at both seasons. This period was one in which the public health was excellent, the death-rate was low, and the birth-rate increased each year showing the marvellous recuperative powers of the people whose fertility had suffered much as a result of the widespread fever epidemic of 1908. During the first three years of the decade the exports from the province increased at a very rapid rate and were associated with a rather smaller increase in imports resulting in the balance of trade turning in favour of the province ; joint stock enterprise continued to boom and, though a large number of companies failed, there was a great rush to register new companies of all natures.

This wave of good health, prosperity and enterprise now received a check. The boom in company promoting came to a sudden end ; the majority of ventures had been unsound from the start and were doomed to failure, and in 1912-13 a large number of fraudulent provident societies were wound up ; in the following year there was a banking crisis and ten banks failed, to be followed by nineteen more in the next year ; thereafter joint stock enterprise declined, its unsound nature having shaken the faith of the would-be investor.

The outbreak of war in August 1914 was accompanied by less disturbance in the life of the province than might have been expected ; its one immediate effect was to reduce the amount of exports and imports but it had little effect on prices till 1917 ; though the people of the Punjab responded magnificently to the call for recruits and added lustre to their ancient martial traditions in every war area, and though the reality of war was brought home to every village throughout the province, the direct effect of the war on population statistics is too small to be traceable.

In 1915 a severe outbreak of plague put an end to the period of increasing good health and vitality and the year showed a rising death-rate associated with a declining birth-rate ; the harvests of 1915-16 were both of them bad, the production in the province was no longer able to nullify the effect of the war on prices and in 1917 commenced a period in which prices rose too rapidly to allow the economic system of the country to adjust itself and in which distress and hardship made itself felt. The strain on the railway systems of the country resulted in a dislocation of communications and markets, and to some extent the province reverted to its condition of earlier days in which local variations in production had undue effect on local prices.

Political disturbance, engineered from Germany and America, in the early days of war had produced a feeling of restlessness and the economic pressure enhanced this feeling and provided a fertile field for the dissemination of political propaganda of a virulent anarchic type.

Disastrous harvests in 1918-19, and the unparalleled loss of life which accompanied an epidemic of influenza in the latter part of 1918, brought matters to a climax ; open mutiny had to be quelled by force in the spring of 1919 and left an

aftermath of racial feeling accompanied by industrial unrest resulting in strikes and open opposition to authority.

Good harvests in 1919-20 proved insufficient to stay the upward rush of prices, and a general failure of crops in 1920-21 created a previously unknown position in which the margin of export proved insufficient to regulate prices which therefore became dependent upon local supply and demand and soared to heights hitherto unknown,—so high that wheat was actually imported into India from Australia in spite of the heavy freightage charges.

The decade closed amidst a general gloom contrasting strongly with the cheerful circumstances in which it had opened ; in that gloom however there were yet signs of better times to come ; the population was showing a recovery from the effects of the influenza unequalled anywhere else in India ; the agricultural community had weathered the storm with remarkable buoyancy and a magnificent spread of co-operative endeavour had placed large numbers from amongst it in a position to reap full benefit from any improvement in conditions ; trading returns were increasing rapidly in value if not in bulk and joint stock enterprise, cleansed by the failures of the earlier years, was beginning to make slight progress on sounder lines.

The War.

24. The Punjab, with its courageous and head-strong Sikhs of the plains, its determined Musalman fighting races of the Salt Range, its disciplined and steadfast Dogras of the foot-hills, and closely associated as it is with the cheerful and pugnacious Gurkhas of Nepal, has long been known as the Sword-Arm of India. These elements in its population with many others, some of whom had already been tried and tempered in the furnace of war and some who had not, all combined to add further meaning and point to that name during the long struggle in which the British Empire had to call upon its resources in men and material to the uttermost limits of its boundaries and outposts.

On practically every front in Europe, Asia and Africa the Punjabi was at some time or another to be found fighting and laying down his life in a struggle of which he but dimly realised the meaning ; in his distant home-country his relations were training and rendering themselves fit to join him, all sections of the people were contributing in service or cash towards the success of the venture in which he was engaged, and the countryside itself was raising produce and even surrendering the capital improvements it had collected in times of peace in the same great cause.

At the census of 1911 the number of men enumerated in the province who were employed in the Imperial and Indian State Armies were 65,283 and 9,375 respectively, these numbers including reservists and men on leave in the province ; it was independently ascertained that there were at that time, apart from reservists, 94,701 Punjabis serving in the Imperial Army ; of these 23,310 were stationed in the Punjab, 69,173 in other parts of India and 2,218 outside India.

At the beginning of 1915 there were over 103,000 Punjabis, of whom 86,967 were combatants, in the Indian Army ; during the war no less than 395,493 men were enlisted in the province and the total number who served in the army during the continuance of war was only just below half a million. Detailed figures for districts and States are reproduced below by the courtesy of Mr. M. S. Leigh from whose war history they have been abstracted ; they are inserted here, not as a tribute to the magnificent efforts they illustrate, but as statistics showing the distribution of the martial races in the Punjab and throwing some light on the monetary resources of its inhabitants as shown by their contributions to objects connected with the war—

District or State.		Number of males of military age in thousands.	Combatants in the Indian Army on 1st January 1916.	Number of men who served during the war.	Number of fatal casualties.	Total contributions to War Funds and Charities in thousands of rupees.	Total contributions to War Loans in thousands of rupees.
Hissar	..	134	3,046	18,400	344	163	8,290
Rohtak	..	118	6,245	28,245	692	92	2,413
Gurgaon	..	124	2,481	20,181	314	169	1,434
Karnal	..	134	633	6,819	67	131	2,445
Ambala	..	121	1,755	10,254	315	173	2,596
Simla	..	72	217	2,213	50	224	6,124

District or State.	Number of males of military age in thousands.	Combatants in the Indian Army on 1st January 1915.	Number of men who served during the war.	Number of fatal casualties.	Total contributions to War Funds and Charities in thousands of rupees.	Total contributions to War Loans in thousands of rupees.
Kangra	123	5,796	17,113	823	129	615
Hoshiarpur	153	5,901	21,153	791	114	1,365
Jullundur	138	3,286	16,404	572	177	3,827
Ludhiana	90	5,995	23,341	622	180	2,909
Ferozepore	166	2,224	20,539	325	441	5,971
Lahore	182	1,501	10,800	322	306	15,417
Amritsar	152	5,328	23,500	804	239	4,329
Gurdaspur	144	2,395	19,204	502	229	2,415
Sialkot	166	2,700	15,339	450	69	1,733
Gujranwala	158	1,643	14,843	271	225	2,136
Gujrat	129	4,510	27,335	672	83	1,016
Shahpur	108	2,834	15,500	210	277	1,742
Jhelum	82	8,652	31,881	990	203	1,104
Rawalpindi	90	8,524	36,292	1,336	213	3,921
Attock	84	2,849	18,851	383	104	1,169
Mianwali	56	1,159	5,000	187	269	623
Montgomery	89	14	3,002	25	130	1,229
Lyallpur	149	338	8,266	102	369	6,479
Jhang	85	44	955	9	105	1,390
Multan	136	39	4,700	16	176	2,990
Muzaffargarh	95	18	2,042	6	118	649
Dera Ghazi Khan	89	10	1,047	8	65	612
BRITISH DISTRICTS	3,367	80,146	423,006	11,298	5,171	86,941
Dujana	4	..	1,266	7	8	19
Pataudi	3	..	450	..	50	224
Kalsia	10	..	1,014	3	138	363
Loharu	3	6	378	1	7	35
Nahan	23	..	1,207	32	684	37
Mandi	29	..	1,124	8	96	628
Suket	9	..	240	3	191	94
Kapurthala	46	271	5,914	115	1,108	1,401
Malerkotla	12	178	3,934	61	1,870	336
Faridkot	23	88	2,759	45	672	1,789
Chamba	22	8	499	27	269	384
Patiala	243	3,898	37,020	780	8,232	4,500
Jind	46	1,283	8,673	311	2,013	1,150
Nabha	43	1,086	7,000	184	994	3,253
Bahawalpur	131	3	4,085	9	611	11,535
STATES	647	6,821	75,563	1,586	16,943	26,028
Contributed by the staff of various Government departments.	..	..	..	..	372	..
TOTAL PUNJAB	4,014	86,967	498,569	12,794	22,486	112,969

Close on one-eighth of the total number of males of military age joined the army ; in Rawalpindi and Jhelum Districts more than one man in every three served with the colours during the war. Contributions to war funds and war loans amounted to thirteen and a half crores or to over five and a half rupees per head of population.

The indirect effects of the war have been roughly indicated in the preceding paragraph and will be treated more fully in the succeeding paragraphs which deal with several phases of the provincial life which were materially influenced by war conditions.

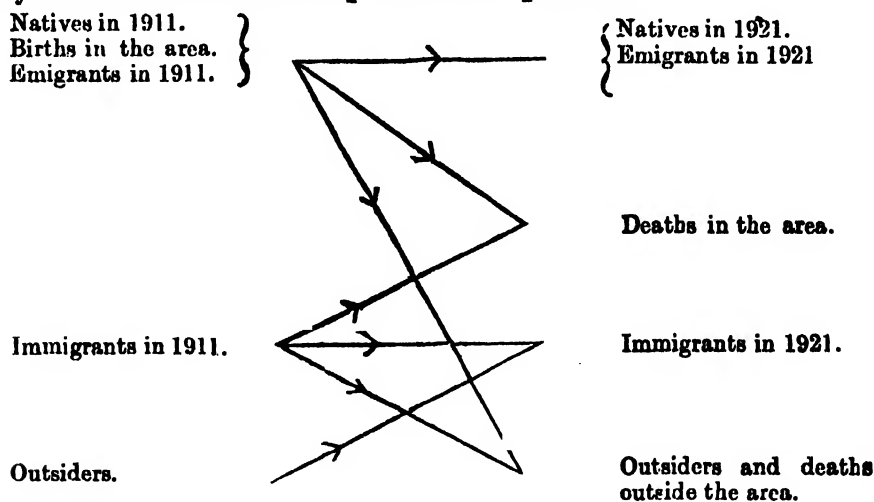
It comes as a shock to the imagination to compare the mortality directly caused by the war with that due to natural causes ; though war casualties were amongst the pick of the population they were numerically insignificant when contrasted with the death-roll caused by the slightest of epidemics ; indeed it is undoubtedly true, as observed by Mr. Leigh, that the war saved more lives in the Punjab owing to the collection of men in cantonments where the ravages of influenza in 1918 were met by efficient medical precautions and remedies than it wasted on the field of battle. It is possible that the absence of so large a proportion of the able-bodied from their homes indirectly affected the population by lowering the birth-rate, but so many of these men were able to visit their homes on leave that the effect was not great enough to be discoverable from statistics. With regard

to its effect upon the numbers of the population the war is an almost negligible factor of a decade which it itself will render unique in history as long as civilisation lasts.

Relation
between Vital
Statistics and
Census
Results.

25. We have already had to refer to vital statistics, and, before discussing those for the last decade in detail, it is necessary to examine the theoretical relation between them and census results and to try to estimate the extent to which reliance can be placed on their accuracy. The system of registration of births and deaths, which is the basis of the vital statistics, was fully described in the Census Report of 1911 and need not be discussed at length; suffice it to say that it depends on periodical reports made at police stations by petty village officers. The illiteracy of the majority of the individuals responsible for the reports combined with the difficulty of ensuring any effective check on the accuracy of their reports renders many omissions possible but does not lead to the registration of any events which have not occurred, and it is therefore probable that the statistics show too few births and deaths; on the other hand the ratio of error by omission is probably much the same from year to year and from district to district, hence in normal times the vital statistics should give an accurate comparison of conditions in different places and at different times. On the whole, deaths are more widely known than births and possibly the vital statistics tend to omit more births than deaths, in which case they lead to an expectation of a larger population than is revealed by an ensuing census, as was the case in 1911; on the other hand severe epidemics, such as the influenza epidemic of 1918, form occasions on which it is impossible for the village officer to keep account of the deaths which are occurring on every side, and in some localities they may carry off all those officers whose duty it is to make and receive reports; *a priori* the number of deaths registered during such epidemics may be expected to be far less than those which actually take place.

There is no satisfactory way of comparing vital statistics with census results for areas subject to fluctuating migration; using the term native to indicate a person born and enumerated in the area concerned, the following diagram shows immediately that the solution of the problem is impossible:—



We have figures for the first two quantities on the left and for the first three quantities on the right of the diagram; each of the seven lines shows the origin and goal of an unknown number of persons; in mathematical language we have seven unknowns connected with five known quantities by only five equations; there is no one correct solution to such a problem and hence to correlate vital statistics with census figures we must import various assumptions as to the nature of the stream of migration.

Without resorting to mathematical reasoning we can illustrate the impossibility by quoting an extreme case:—suppose that soon after the census of 1911 a great wave of migration entirely altered the constitution of the population of any tract and that a return wave occurred before the census of 1921, then the vital statistics refer to persons who were in the tract neither in 1911 nor in 1921 and hence have no connection with the census figures.

Subsidiary Table V at the end of this chapter contrasts the increase in the actual and natural populations of all districts with the excess of births over deaths

during the decade, that is, with the natural increase ; but before that table can be of any use it is necessary to understand how far the three sets of figures should agree if they were absolutely accurate, and I therefore explain the connection between them below :—*The increase in actual population exceeds the natural increase by the excess of immigration over emigration in the decade.*

The natural population of 1921 equals the natural population of 1911 plus all births in the district minus deaths amongst persons born in the district. But the deaths amongst persons born in the district equal the deaths in the district minus the deaths amongst immigrants plus the deaths amongst emigrants. Hence *the increase in natural population exceeds the natural increase by the excess of deaths amongst immigrants over deaths amongst emigrants.*

To compare the figures we want, in the first case, to know the excess of immigration over emigration in the decade, and in the second case, to know the excess of deaths amongst immigrants over those amongst emigrants ; neither of these quantities are known and neither of them can be calculated from the figures available.

As a matter of fact the two equations which have been mentioned are identical :—the immigration during the decade equals the immigrants enumerated in 1921 minus those enumerated in 1911 minus the deaths amongst immigrants ; similarly, the emigration during the decade equals the number of emigrants enumerated in 1921 minus those enumerated in 1911 minus the number of deaths amongst emigrants. If we substitute these equivalents in the first equation it reduces itself to the second equation.

We can however establish a direct connection between the census figures and the vital statistics provided we assume that the stream of migration is constant and also assume some reasonable death-rate as being applicable to migrants.

The death-rate in the Punjab has averaged 36·2 per *mille* during the last decade, but 44·7 of the deaths have been amongst children of less than five years of age so that the death-rate amongst the remainder has only been 20 per *mille*. Most of the migration of the Punjab is within the province and the migrants include few children of tender age, hence it is reasonable to assume a general death-rate of 20 per *mille* amongst them.

810	die each year and at the end of the decade only four-fifths of
830	them survive. Of 1,000 new immigrants coming in during
850	the year 1911-12 ten die in that year and twenty in each
870	of the nine remaining years so that 810 survive at the end
890	of the decade ; of 1,000 new-comers in 1912-13 ten die in
910	that year and twenty in each of the remaining years so
930	that 830 survive ; and so on. Thus out of 10,000 new
950	immigrants who come in during the decade only 9,000
970	survive as shown in the margin.
990	
9,000	

The immigrants in 1921 are made up of the survivors of those present in 1911 and of the survivors of the new immigrants who came in during the decade, hence the number of immigrants enumerated in 1921 equals four-fifths of those enumerated in 1911 together with nine-tenths of those who have come in since that year. Hence the number of immigrants of the decade can be calculated from the census figures and in an exactly similar way the number of emigrants during the decade can also be calculated.

The excess of immigrants over emigrants during the decade has been calculated according to this method for every district and state and the results are entered in column 11 of Subsidiary Table IV.

But, as we have already seen, the total increase in any district is made up of this excess and of the excess of births over deaths ; hence we can calculate the excess of births over deaths from the census figures alone and compare the result with the numbers actually recorded.

As the system of registration precludes the possibility of more births or deaths being recorded than actually occur, any error in the vital statistics must be in the direction of showing too few ; and if calculation from the census figures shows a greater excess of births over deaths than the recorded figures the error must be in the number of births recorded and *vice versa*.

The inset table shows the corrections that must be applied to the vital statistics in order to make them agree with census results, *provided* the assumptions on which the calculations have been based do not vitiate the argument; but before we can accept these corrections we must see how far those assumptions are justifiable. The assumptions that have been made are :

District.	Recorded deaths.	Calculated deaths.	Difference per cent.
Attock ..	168,959	197,076	16.6
Gujrat ..	267,052	300,735	12.7
Mianwali ..	115,762	127,117	9.8
Lyallpur ..	258,860	183,870	9.7
Jhelum ..	170,358	186,306	9.4
Gurdaspur ..	324,812	352,541	8.5
Jhang ..	162,445	175,448	8.1
Sialkot ..	359,708	388,609	8.0
Muzaffargarh ..	187,897	201,612	7.3
Rawalpindi ..	191,626	203,480	6.2
Multan ..	265,634	280,362	5.5
Kangra ..	257,856	269,209	5.2
Hoshiarpur ..	316,059	329,577	4.3
Ludhiana ..	203,639	211,410	3.8
Hissar ..	294,117	304,337	3.5
Karnal ..	353,466	358,998	1.6
Dera Ghazi Khan ..	146,043	165,504	1.3
Ambala ..	273,820	275,420	0.6
Amritsar ..	363,498	365,328	0.5
	Recorded births.	Calculated births.	Difference per cent.
Ferozepore ..	457,256	457,689	0.0
Jullundur ..	353,093	356,354	0.9
Lahore ..	485,359	493,501	1.7
Montgomery ..	229,082	280,902	21.3
Shahpur ..	268,459	336,711	25.4
Simla ..	8,286	21,202	155.9

—(1) The death-rate amongst migrants is about 20 per *mille*; (2) the same number of immigrants come in and the same number of emigrants go out every year; and (3) once an immigrant comes to a district he does not leave it and an emigrant never returns.

The first assumption is based on general grounds and it is safe to assume that the death-rate amongst migrants is not far from 20 per *mille*; for the sake of argument let us assume the impossibly high death-rate of

40 per *mille* amongst migrants and work out the result; selecting a few districts at random we find that in Attock the recorded deaths should be increased by 14.9 instead of 16.6 per cent.; in Multan by 6.8 instead of by 5.5; in Kangra by 3.1 instead of 5.2; whilst in Shahpur the recorded births should be increased by 17.4 instead of by 25.4. The result of assuming an impossibly high death-rate is to alter the conclusions but slightly, hence the result of 20 per *mille* not being an absolutely correct death-rate for migrants will affect the results very slightly indeed. In other words the first assumption scarcely affects the accuracy of the result.

Now take the second assumption; by assuming that the migration was constant we found that nine-tenths of the migrants of the decade survive at the end of it; if all the migration occurred directly after the 1911 census then four-fifths of them would survive, whilst if it all occurred just before the last census the whole of them would survive; in other words, the difference caused in the figures in column 11 of Subsidiary Table IV would have to be increased or decreased by only one-ninth even if the whole migration took place in 1911 or in 1921, hence the difference necessary in them on account of the slightly fluctuating nature of migration must be very slight indeed.

The third assumption however leads us further astray as much migration is temporary; if an immigrant both arrives and departs during the decade he has no effect at all on the statistics; if however he was enumerated as an immigrant in 1911 his subsequent departure is equivalent to an unrecorded death. Similarly a man who both emigrates and returns during the decade does not affect the calculations, but if an emigrant enumerated in 1911 returns during the decade his arrival is equivalent to an unrecorded birth in the district.

The third assumption therefore affects the accuracy of the result in districts in which the immigrants and emigrants recorded in 1911 were largely temporary migrants and have since returned to their homes.

Having analysed the effect of the assumptions on which they are based we can now examine the results. At the head of the table are districts in which either (1) the deaths have not been fully registered, or (2) immigrants in 1911 have since returned to their homes. Amongst the districts at the head of the list are Attock, Lyallpur, Jhelum, Gurdaspur, Jhang, Sialkot and Muzaffargarh in all of which the balance of migration has been away from the district and probably several immigrants recorded in 1911 have since left them; in these our third assumption has probably resulted in magnifying the correction which

is necessary in the recorded deaths. Amongst the districts at the foot of the list Ferozepore, Lahore and Montgomery are districts which have been gaining by migration and to which no doubt many old emigrants have returned, in them the correction to be applied to the number of births on record has probably been exaggerated.

On the whole our third assumption has tended to enhance the corrections which the figures show to be necessary; yet, even as they stand, these corrections show that remarkably little error exists in the vital statistics; in only five districts out of twenty-five does the error exceed ten per cent. It has always been recognised that vital statistics are inaccurate but I have been unable to find records of any attempt to gauge the extent of the inaccuracy, I believe that this attempt establishes the fact that the vital statistics are far less erroneous than their most friendly critics have imagined.

Having, I hope, proved that the method employed does not lead to violent errors and also that the majority of the vital statistics are very close to the truth, I must give some reasons to account for the exceptional cases of Montgomery, Shahpur and Simla. In the last case this is easy for more than two-thirds of the population of this district is urban and almost entirely consists of periodic or occasional visitors; this district forms an example of the fictitious case, mentioned early in this paragraph, of an area in which the vital statistics refer to persons who were present in the district at neither census.

In Montgomery the immigrants constituted 11 per cent. of the total

IMMIGRANTS AND EMIGRANTS EXPRESSED AS PERCENTAGES OF THE TOTAL POPULATION.

District.	Immigrants.		Emigrants.	
	1911.	1921.	1911.	1921.
Simla	47	31	35	28
Shahpur	21	11	5	5
Montgomery	11	20	20	15
Hissar	17	12	4	7
Gujrat	4	7	15	12
Jhelum	7	5	12	16
Ferozepore	21	19	14	12
Rawalpindi	13	15	9	8
Ambala	17	15	19	19
Jhang	5	4	16	14
Sialkot	8	7	25	27
Amritsar	12	11	22	26
Karnal	13	12	11	10
Kangra	5	4	6	7
Attock	4	3	6	6
Muzaffargarh	5	4	4	4
Jullundur	11	11	22	26
Ludhiana	16	16	24	20
Hoshiarpur	7	7	18	20
Lahore	21	21	12	13
Gurdaspur	9	9	19	19
Multan	11	11	5	5
Mianwali	4	4	7	7
Dera Ghazi Khan	3	3	4	4

population in 1911 and no less than 20 per cent. in 1921 in Shahpur the immigrant proportion of the total population dropped from 21 per cent. to 11 per cent. in the decade; where the stream of migration is so great as this any assumption concerning it must lead to appreciable error and in these two districts, at least, I abandon reliance on the accuracy of the conclusions I have drawn. The existence of these exceptions renders it necessary to indicate the districts in which violent fluctuations in the proportion of immigrants at the two censuses most affect the results; this is done by the inset table in which I have tried to place those districts for which the results must be least reliable at

the top. Except in the first three districts the fluctuations have been insufficient to affect the results materially, whilst the figures in the lower part of the table show how very constant the stream of migration must be throughout the greater part of the province and therefore support the conclusion that the results are little affected by the second assumption on which they were based.

Before leaving this subject it is perhaps necessary to meet an argument by which the whole method might be attacked, which is that the discrepancy between vital statistics and census results has been assumed to be due to errors in the former rather than in the latter. My reply to this is that census figures for total population are subject to very little error; those for immigrants and emigrants are however affected by birth-places being incorrectly recorded, for instance an immigrant father may give his own birth-place for every member of his family forgetting that some members were born after his immigration; the error therefore is limited to one of the four figures for immigrants and for emigrants of 1911 and of 1921. Using the same method, but assuming that the vital statistics are correct, we find that the error in Attock would be any one

of the following:—

- (1) Immigrants of 1921 should be 46,065 instead of 16,830.
- (2) Emigrants of 1921 should be 495 instead of 29,732.
- (3) Immigrants of 1911 should be 51,078 instead of 19,446.
- (4) Emigrants of 1911 should be—3,516 instead of 28,116.

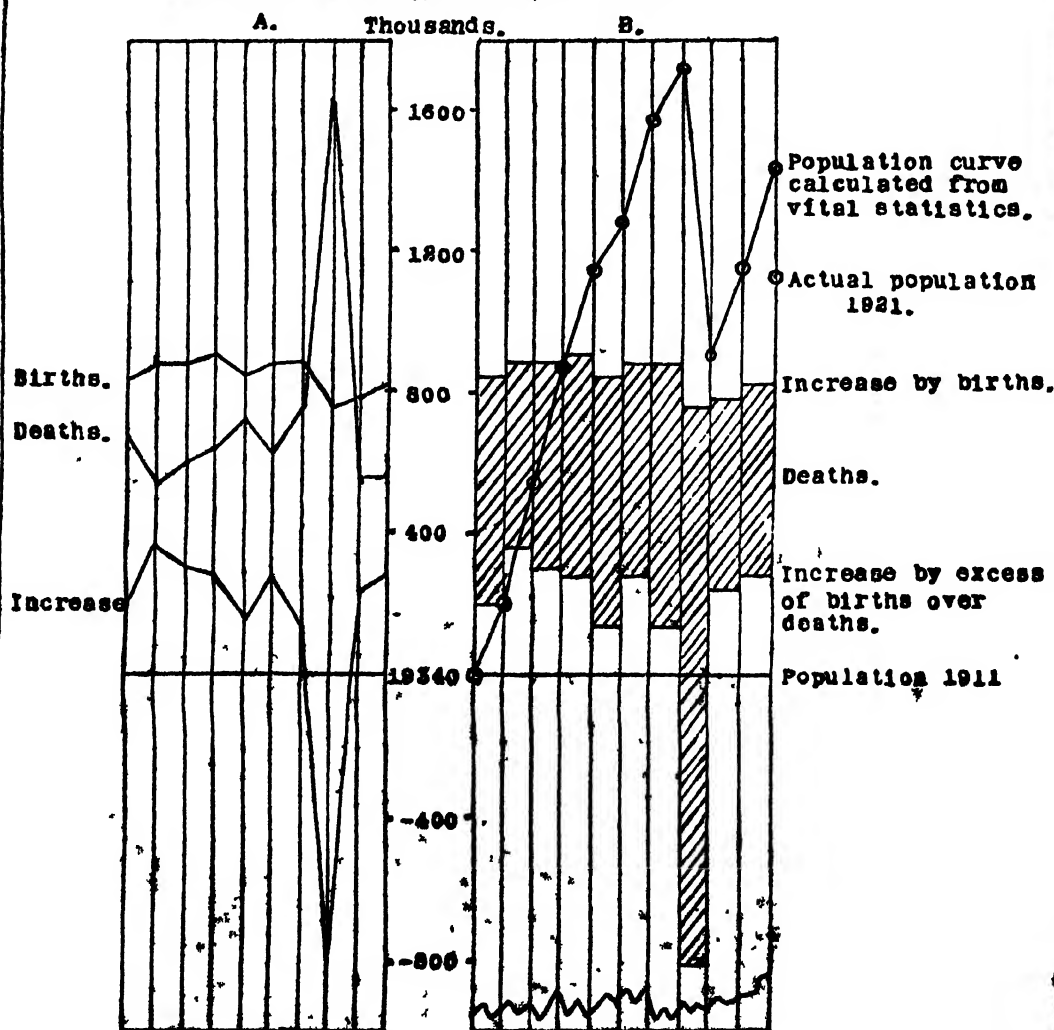
All these errors are far beyond the bounds of possibility, hence it is reasonable to assume that the comparatively small correction in the vital statistics is the one to be adopted. Similarly in all other districts it will be found that there is either a small error in the vital statistics or an impossibly large error in the census figures, and hence it is entirely justifiable to use the census figures as a check on the vital statistics but not to invert the process.

Public Health.

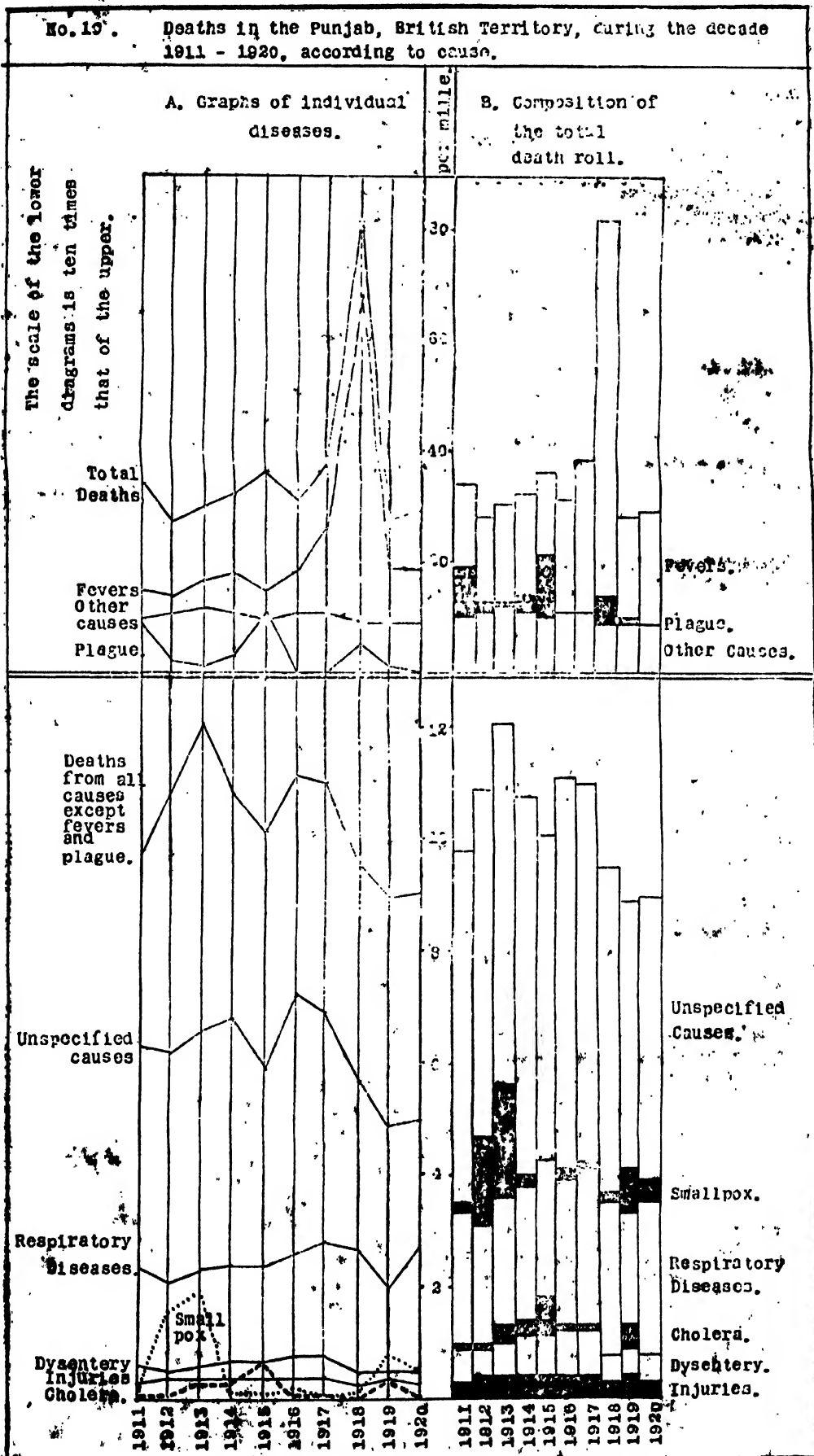
26. Except for the devastating epidemic of influenza which swept over India in 1918 and caused the largest number of deaths which have ever occurred in the Punjab in one year since any record of vital statistics has been maintained, the health of the province maintained a high general level throughout the decade.

Compared with other provinces in India both the birth-rate and the death-rate of the Punjab are high; in 1916, 1919 and 1920 the Punjab showed the highest birth-rate in any of the ten large reporting provinces in India; in 1911, 1914 and 1915 the Punjab birth-rate was only exceeded by that of the Central Provinces, whilst in the remaining four years of the decade only the United Provinces and the Central Provinces showed higher birth-rates. In 1915 the Punjab was unfortunate in showing the highest death-rate in India, and in 1917 Bombay was the only province returning a higher death-rate; in the other eight years the Punjab has stood third on the list three times, fourth twice and seventh twice, whilst in 1920 it took ninth place.

No. 9. BIRTHS, DEATHS AND NATURAL INCREASE IN THE PUNJAB, BRITISH TERRITORY, IN THE DECADE 1911 - 1920.



In reading the following brief account of the health conditions of the decade, great assistance will be found from reference to diagrams numbers 9, 10 and 11 which will be found to illustrate the characteristics of the years in a way which enables each to be regarded in association with the others:—



of the following:—

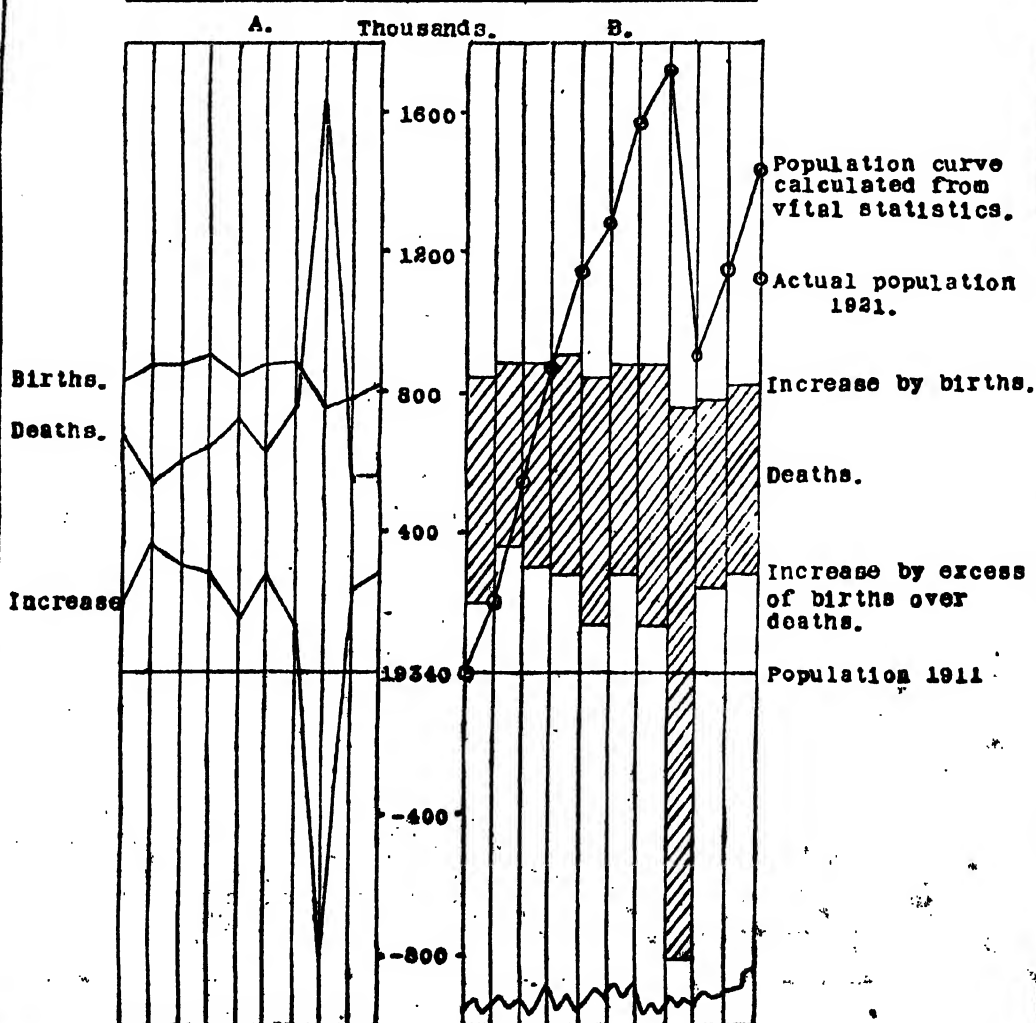
- (1) Immigrants of 1921 should be 46,065 instead of 18,830.
- (2) Emigrants of 1921 should be 495 instead of 29,732.
- (3) Immigrants of 1911 should be 51,078 instead of 19,446.
- (4) Emigrants of 1911 should be—3,516 instead of 28,116.

All these errors are far beyond the bounds of possibility, hence it is reasonable to assume that the comparatively small correction in the vital statistics is the one to be adopted. Similarly in all other districts it will be found that there is either a small error in the vital statistics or an impossibly large error in the census figures, and hence it is entirely justifiable to use the census figures as a check on the vital statistics but not to invert the process.

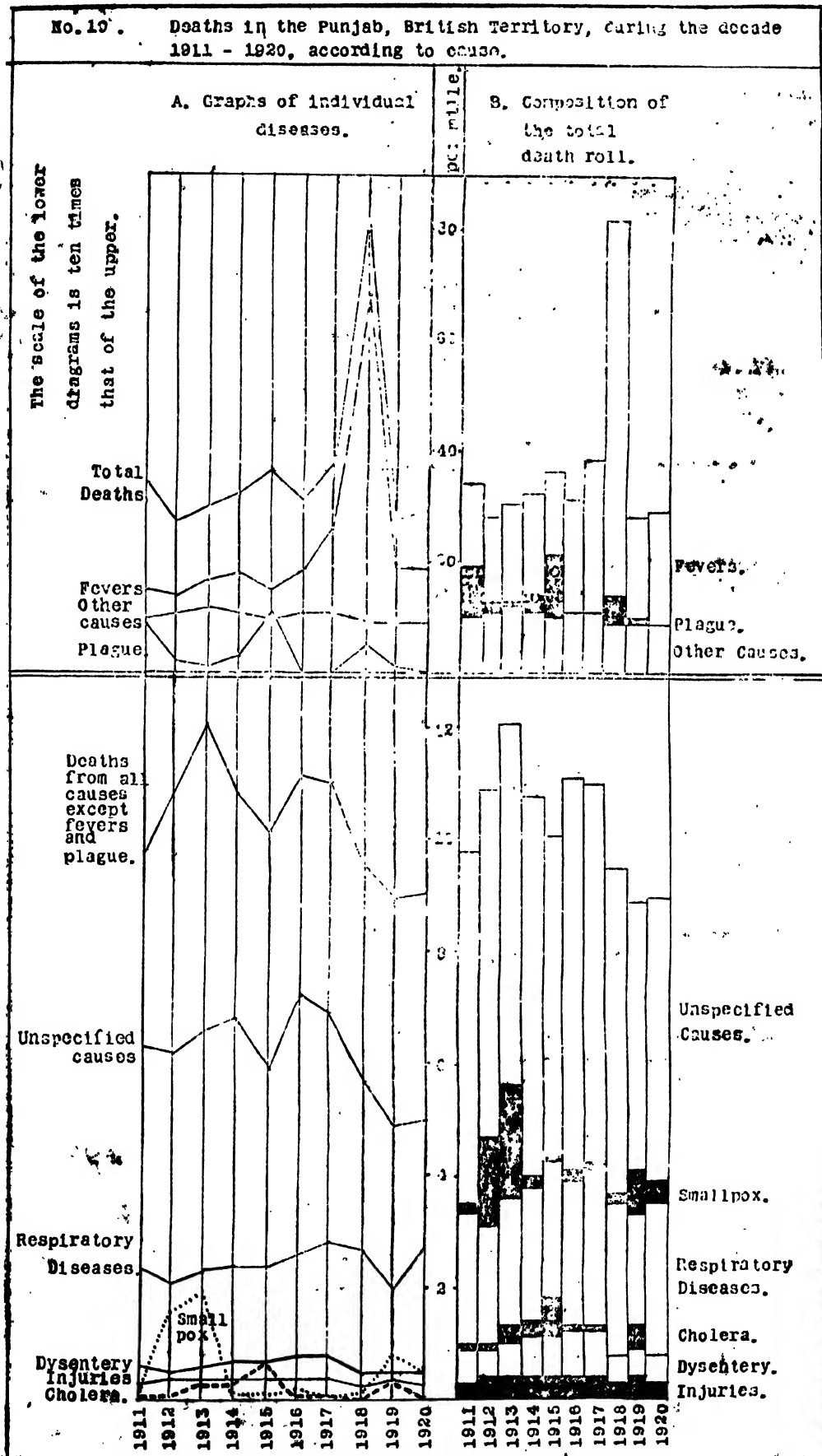
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1911 was described at the time as an exceptionally healthy year except for the occurrence of plague, which disease contributed 8·9 to the death-rate of the year. The healthiness was mainly due to a defective monsoon which resulted in a freedom from fever which only contributed 15·3 to the death-rate and was lighter than in any previous year since 1887. There was an outbreak of cholera in the Sialkot District, but though severe for a time it was not of sufficient extent to affect the death-rate of the province to any appreciable degree. A glance at the diagram shows that the birth-rate of this year was exceeded five times in the decade and that in six subsequent years the death-rate was lower; yet at the time the birth and death-rates were described as high and low respectively, showing at once how much more favourable the conditions of health were in this decade than the last.

1912, described as the healthiest year since 1886, quite eclipsed the previous year in the brightness of its vital statistics; another weak monsoon resulted in an even further decline in the death-rate from fever, plague abated and there were no epidemics except one of small-pox. The total death-rate of 26·6 was the lowest for many years and was accompanied by the very high birth-rate of 45·3, due probably to the effect of three consecutive healthy years on the fertility of the population.

1913 started with a legacy from the previous year in the shape of small-pox, and this disease continued till the middle of the year causing a greater mortality than it had done for seventeen years previously; in February it accounted for 8,551 deaths, the highest number ever recorded from it in a single month. An early and weak monsoon produced conditions unfavourable to the spread of plague which showed a mildness unknown for many years; the conditions were also unfavourable to fever, and though fevers accounted for more deaths than in the two previous years they could not be termed severe. The death-rate rose to 30·2, the birth-rate just exceeded that of 1912 being 45·4 which was the highest recorded in the province since 1900.

1914 proved to be yet another healthy year; the continued sequence of these had a cumulative effect on the birth-rate in each year and in this year it rose to 46·3, the highest for any year in the decade; this rate had been exceeded only once since 1878, namely in 1899. This year marked the end of a series of years in which the fertility of the people gradually recovered after the prejudicial effect of the great malaria epidemic of 1908. In this year the mortality from both fevers and plague increased, and though neither of these were heavy they showed an appreciable effect on the total death-rate which rose to 32·0.

1915 was a bad year in comparison with those preceding it; heavy rain in March and April delayed the hot weather and produced conditions favourable to the flea, the chief disseminator of plague, and a severe epidemic of this disease resulted; in respect of other diseases the year was a healthy one. The total death-rate rose, entirely on account of plague, to 36·3 and at the same time the birth-rate dropped to 43·6.

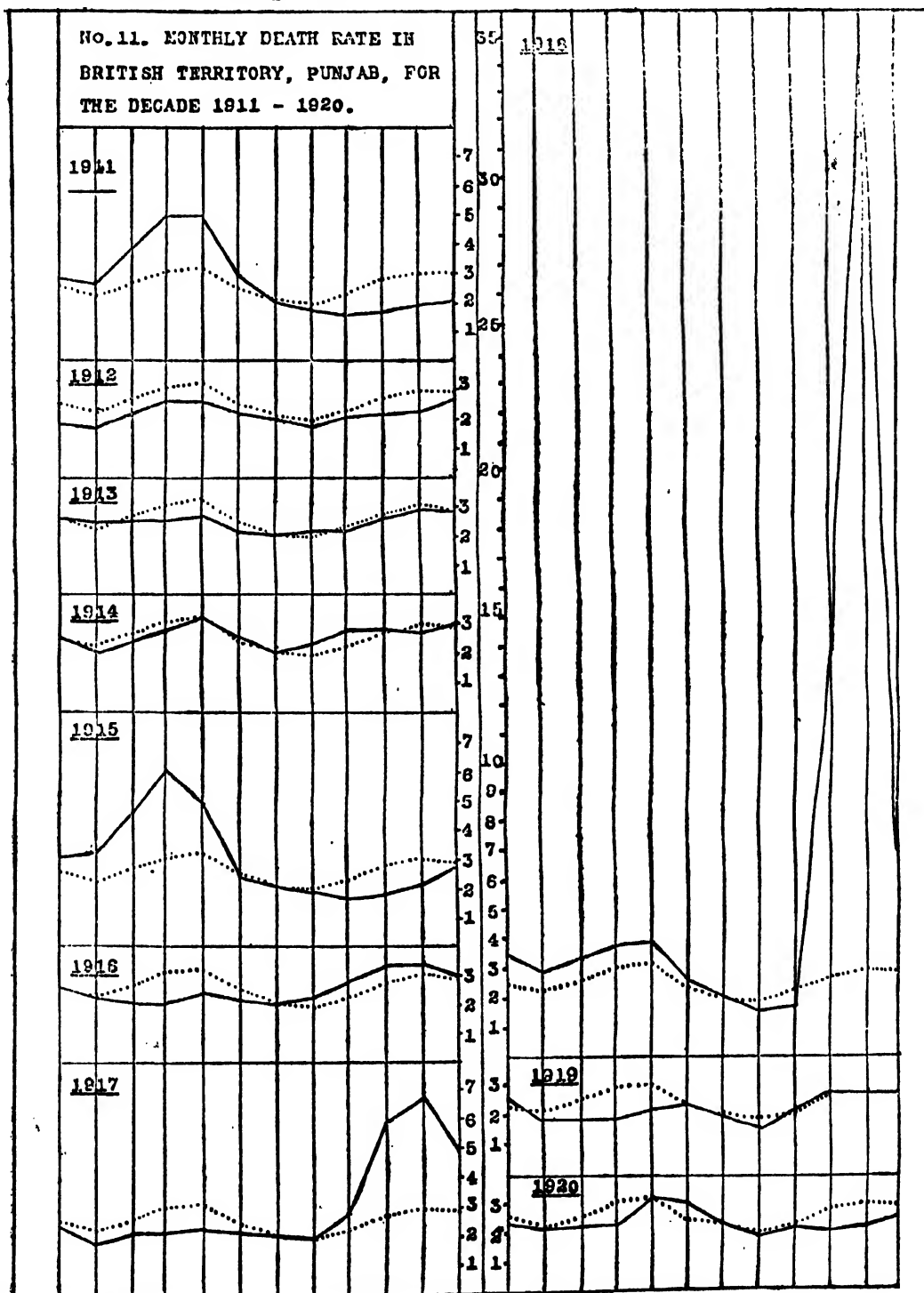
In 1916 a heavy and prolonged monsoon caused an increase in malaria, and more than half the deaths of the year were caused by fevers. In other respects however the year was a bright one; plague was less than it had ever been in the Punjab since it first made its appearance in the province, in fact in July the province was declared to be free of plague for the first time for twenty years. The total death-rate dropped to 30·7 and the birth-rate rose to 45·6 being the highest recorded in any province in India.

In 1917 heavy rainfall in April and May followed by a monsoon which gave much rain from June right on into October, produced conditions in which an epidemic of fever was inevitable; from September onwards malaria was rife and the epidemic was the worst since 1908. Plague on the other hand was very light and the year was the lightest small-pox year on record. The birth-rate reached practically the same figure as in the previous year, but the death-rate rose owing to the fever epidemic to 37·9.

The first nine months of 1918 shewed little indication of the dreadful visitation of disease and death which swept the province in the closing months of the year. Plague was severe in March and April, but otherwise all diseases were less active than usual; it is true that two epidemics of influenza appeared in August and September, the first in Lahore, Simla and Amritsar, and the second universally spread over the province from Gurgaon to Attock; but the influenza was of a mild form and caused inconvenience but no alarm, in fact the death-rates in

these two months were the lowest during the year. But in October influenza of a most malignant type spread over the whole countryside, and the death-rate for the month leapt up to 13·9 per *mille* against a normal average of 2·8 ; in the next month it increased to the staggering figure of 34·2 and in December declined to 7·0 against a normal average of 2·9.

The next paragraph deals with this outbreak of malignant influenza and in this review of the years of the decade suffice it to say that the death-rate for the year rose to 81·0 whilst the birth-rate dropped down to 39·6 ; population which, according to vital statistics had been increasing rapidly and steadily throughout the decade, now fell within the short space of three months to very little more than it had been at the end of 1913 five years previously. Though the outbreak lasted but three months, the death-rate for the year rose to the highest figure on record, and that for November to a figure incomparably higher than had ever been recorded before in a single month.



1919 proved to be a very healthy year; small epidemics of cholera and small-pox formed unpleasant features but did not prevent the death-rate from dropping to the lowest on record since 1912. A very short-lived monsoon resulted in little fever, and plague was light. The low death-rate was mainly the result of the absence of fever and plague, but it is a matter of speculation how far that absence was due to the weeding out of the weaklings by the awful mortality of the previous year.

There was no recrudescence of the influenza though a few cases were reported and caused anxiety to the medical authorities, but the disease left its mark upon the year in the shape of an exceptionally low birth-rate. It is noteworthy however that the low birth-rate of 40·3 returned in the Punjab was yet the highest returned by any province in India; and that the death-rate of 28·3 was exceeded by eight out of the other nine large provinces; which two facts illustrate the marvellous recuperative powers of the population.

1920 was again a healthy year; there was little rain except for some unusual falls in May and there was little fever. The Punjab again took pride of place in India in respect of its birth-rate of 42·9, which, though low, was considerably in excess of that of the preceding twelve months; and again its death-rate of 28·6 was exceeded by six other provinces.

To sum up, the decade may be described as an exceptionally healthy one with the exception of the one appalling outbreak of influenza in 1918; in a series of particularly good years 1915 and 1917 stand out as less healthy than the rest owing to epidemics of plague and fever respectively. This series of good years has resulted in a high birth-rate, which however was brought down with a rush in 1918 and has not yet reached its former level though it has improved in each of the subsequent years.

At the end of the decade there were most cheering signs of a rapid recovery after the desolating events of 1918; the death-rate was exceptionally low and though the birth-rate was naturally at a low ebb after the exceptional mortality amongst young adults in 1918 it was yet improving; both in respect of its birth-rate and death-rate the Punjab was comparing most favourably with other parts of India, and renewing its depleted population at a greater rate than any other province.

27. Rumours of the existence of influenza in the Punjab arose in July of 1918, but no cases were definitely reported till August when the disease appeared in recognisable form in Simla, Lahore and Amritsar; the disease was then in a mild form with very low case mortality and caused no anxiety; it was more prevalent amongst Europeans than Indians. This light epidemic died out and was succeeded by a second in September which was of much greater extent and spread throughout the length and breadth of the Punjab; but it too was of a mild variety and caused few deaths. The mild form of the disease in both epidemics is illustrated by the fact that the death-rates in August and September were lower than the average for those months and were less than in any other months of the year.

In October the disease appeared for the third time; it was now in a malignant form and was allied with a very fatal type of pneumonia; by the middle of the month it had spread throughout the plains of the Punjab and reached the hill districts soon after. It appears to have been spread mainly by returning military units, post office and railway employees and general travellers; the infection was extremely rapid, the period of incubation being rather less than two days.

From the middle of October to the middle of November the state of the province beggars description. Hospitals were choked, dead and dying lay by the sides of the roads, burial grounds and burning ghats were strained beyond their capacity and corpses lay awaiting burial and cremation. Terror and confusion reigned supreme, the postal and telegraph services were disorganised, and a harassed and depleted medical service struggled valiantly but ineffectually to cope with the disease. During this period large numbers of the educated classes earned the gratitude of the sufferers by devoted self-sacrifice and social service, whilst medical students throughout the province rendered every assistance within their power.

The disease proved especially fatal to young adults including women of child-bearing age, and was said to single out pregnant women more than others. It was capable of treatment, and even elementary knowledge of simple rules of

health would have rendered it far less disastrous ; as far as can be ascertained the case mortality was rather under five per cent. amongst Europeans, about six per cent. among Indians of the higher classes who were able to obtain medical attention, and anything over fifty per cent. amongst the Indians of the countryside who had no knowledge of the treatment to be adopted and could not obtain medical aid. In towns though the medical staff could not attend all cases, they were able to do a great deal more than in rural tracts by the publication of advice as to simple precautions and expedients, with the result that the mortality in urban areas was only 36 per *mille* as against 51 per *mille* in rural areas.

During the first five years of age males were more subject to attack than

Age.	Death-rate per millr.	
	Males.	Females.
Under 1 ..	30.36	27.47
1—5 ..	37.05	36.82
5—10 ..	25.22	29.53
10—15 ..	28.42	40.91
15—20 ..	43.50	59.97
20—30 ..	47.46	59.10
30—40 ..	50.22	63.01
40—50 ..	52.72	60.30
50—60 ..	66.68	80.16
60 and over ..	77.00	92.74
All ages ..	45.71	54.76

females, but above this age the mortality amongst females was much in excess of that amongst males ; the greatest mortality was amongst persons of 15 years of age and upwards each succeeding age group after this showing a greater death-rate from the disease than that below it. This is clearly shown by the marginal figures which show the death-rate for each group amongst both males and females.

It must be noted that no separate returns of deaths by influenza were prepared at reporting stations ; in its various phases the malignant type resembled sometimes pneumonic plague and sometimes relapsing fever ; it was almost invariably returned under the head of fevers, and separate

figures for it have been compiled by the medical authorities by deducting the normal number of deaths in each month from the total recorded during the epidemic ; this method was no doubt rough and was more likely to result in minimising the number of deaths than in exaggerating it for it is probable that during the epidemic the mortality from other fevers was less than the normal for the time of year. It is, however, not from misclassification so much as from failure of the registration system that we may expect errors to exist in the returns prepared for influenza ; with the countryside being devastated by the scourge it must have been impossible for village *chaukidars* to give in accurate reports of the number of deaths ; it is extremely probable that a great deal of the mortality never found its way on to the death registers, and that the vital statistics grossly underestimate the number of deaths caused by the epidemic. As far as the statistics can be trusted, the incidence of the death rate in the different districts of the province is given below---

Death-rate from influenza by districts.

Gurgaon	123.1	Amritsar	42.2
Rohtak	96.2	Muzaffargarh ..	41.6
Ludhiana	77.4	Lyallpur	41.2
Hissar	67.2	Mianwali	41.1
Montgomery ..	65.4	Jullundur	40.3
Karnal	60.8	Gujrat	39.8
Ferozepore ..	57.5	Shahpur	36.5
Lahore	56.0	Jhelum	35.1
Multan	53.9	Attock	32.0
Dera Ghazi Khan ..	53.5	Sialkot	29.3
Gujranwala ..	46.4	Hoshiarpur ..	26.0
Gurdaspur ..	45.7	Rawalpindi ..	25.9
Ambala	44.9	Simla	23.9
Jhang	44.5	Kangra	22.9

The mortality was heaviest in the south-east of the province, but there is some doubt as to the figures for Gurgaon as in that district there was an epidemic of relapsing fever going on concurrently with the influenza and it was impossible to separate the figures for the two ; the hill districts were affected least, and it may be noted that it was in these that the epidemic appeared and disappeared latest.

By the end of November the influenza was rapidly disappearing in the plains, but it was nearly a month later before the hill districts were free. Though the epidemic died out as quickly as it appeared, and did not recur in the last two years of the decade, it left behind it a population depleted of its young adults and its effect on the birth-rate will probably be traceable well into the next decade.

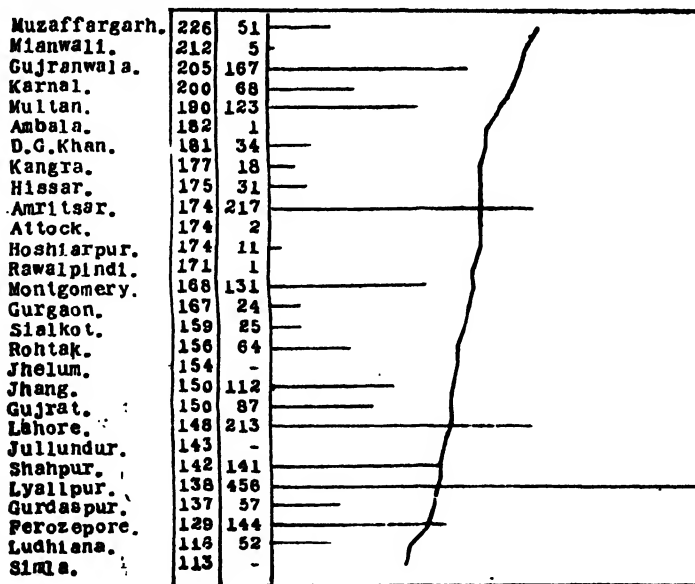
The diagrams which illustrate the preceding paragraph show far more clearly the effect of the epidemic than any description can do ; note for instance the enormous rise in the death-rate of 1918 and the sudden drop in population in the midst of a period of continuous and rapid increase as shown by diagrams 9 and 10 ; and, more striking than all, note the course of the death-rate by months over the whole decade as shown in diagram number 11.

28. It has often been said that the spread of canal irrigation is accompanied by a deterioration in the health of the people, due to the conditions of canal-irrigated tracts being favourable for the production of malaria. In paragraph 62 of the 1911 Census Report this drawback of canal irrigation was made the subject of comment, and a diagram was inserted to show the connection between it and fever mortality ; in examining that diagram I have failed to see that it supports the theory that it is said to illustrate.

The theory is an important one and I have gone into the available statistics in great detail, but can find nothing in support of it; it is however so widely accepted, that I insert a diagram illustrating one of the many ways in which I have attempted to test it. The basis for the fever mortality figures in this diagram are those for rural tracts only, and by omitting the figures for 1918 from the totals of the decade I have eliminated the influenza epidemic, which spread without any relation to irrigation ; separate figures for malaria are not available but it constitutes the principal disease amongst those tabulated as fevers. For irrigation figures I have chosen those given in the Season and Crop Report for 1918-19 as they appear to be representative for the decade as a whole.

No. 14. CANAL IRRIGATION and MORTALITY from FEVERS.

The first column of figures shows the number of deaths from fevers, per mille of population, during the decade 1911-20, omitting the year 1918.
The second column of figures shows the number of acres irrigated from canals in every square mile, in the representative year 1918-19.
The figures in the first column are plotted in a curve, and those in the second column are indicated by horizontal lines opposite to them.



The diagram shows at a glance that there is no obvious connection between canal irrigation and fever ; six widely irrigated districts have a very low fever death-rate, the most widely irrigated of all is exceptionally free from fever. Only two widely irrigated districts have high fever mortality, whilst two more have a mortality close to that for the province as a whole. Mianwali and Ambala, with practically no canal irrigation, suffer severely from fever ; Lahore, Shahpur, Lyallpur and Ferozepore with widespread canal systems are remarkably free.

Moreover in those irrigated districts which do suffer severely from fever there are special causes for its prevalence, which, though they arise from canal irrigation, are not necessary concomitants of it ; these districts are, Gujranwala, Karnal, Multan and Amritsar.

In Gujranwala, Karnal and Anritsar the presence of water-logging has long been recognised as inimical to health and its eradication has been the subject of much thought and endeavour; in Multan, surrounded by rivers, there is a very large area of irrigation by inundation, which leaves water lying on the surface far longer than irrigation from perennial canals. If these four districts were omitted from the diagram, the majority of irrigated districts would be left congregated at the bottom of it, almost indicating that canal irrigation is beneficial in combating fever; but I certainly do not put this forward as a theory and I limit my conclusions to the negative assertion that statistics show no connection between fever and canal irrigation except when accompanied by water-logging.

The introduction of canals may lead to an increase of fever, but does not bring an increase sufficient to render the tract more liable to fever than tracts where canals are unnecessary.

29. The following statement in which sown and matured areas are shown as percentages of the average sown and matured areas for the decade and failed areas as percentages of the sown areas, gives a rough idea of the nature of each harvest and the result on the total produce for each year of the decade.

This statement together with diagrams numbers 7 and 8 which illustrate

Year.	Kharif.		Rabi.		Total.
	Sown.	Failed.	Sown.	Failed.	Matured.
1911-12	69	31	111	14	93
1912-13	106	24	94	13	99
1913-14	111	24	90	10	99
1914-15	112	18	115	7	122
1915-16	81	27	100	24	84
1916-17	118	10	111	16	119
1917-18	111	19	122	11	123
1918-19	78	41	79	10	74
1919-20	110	17	101	10	110
1920-21	104	36	78	25	75

this paragraph should be referred to as the note on each of the years of the decade is read and will then be found to reflect most of the characteristics of those years. The scales of the two diagrams should be carefully noted, otherwise they will give a wrong idea of the relative

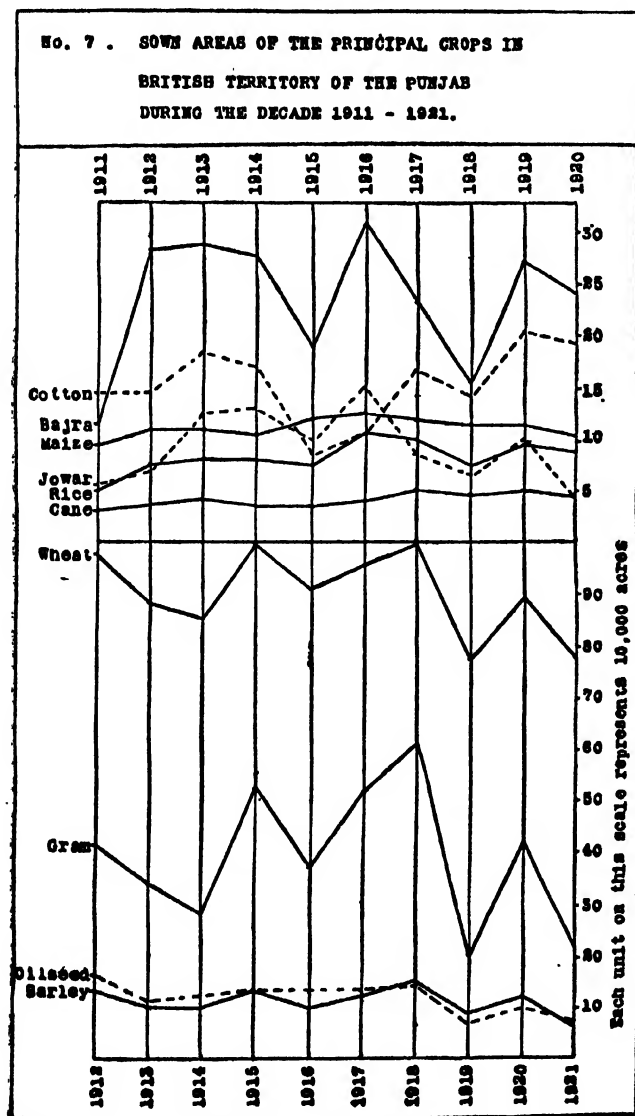
importance of spring and autumn crops; for in order to show the variations in the latter, they have had to be shown on a much larger scale than the spring crops.

The decade opened disastrously; there were no early rains in 1911 and kharif sowings were very much restricted in consequence and covered a smaller area than in any other year of the ten; this was in one way fortunate for an intense drought which lasted from the middle of June till the latter end of August caused very heavy failure.

The canals stood the strain upon them very well, but irrigation on their lower reaches was scanty; and the water in the rivers was so low that many inundation canals failed to function at all; in freely providing water for fodder crops the Government canals did good work and saved the lives of thousands of cattle, for fodder scarcity was acute.

Most unusually heavy falls of rains occurred on October 26th and continued for some four weeks, entirely changing the agricultural outlook and enabling the people to attempt to recoup

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their losses by sowing spring crops on a larger area than usual. A wet January raised hopes of a record spring harvest, but extreme dryness in the next two months dashed these hopes; showers in April saved the wilting crops and the resulting harvest was well above normal.

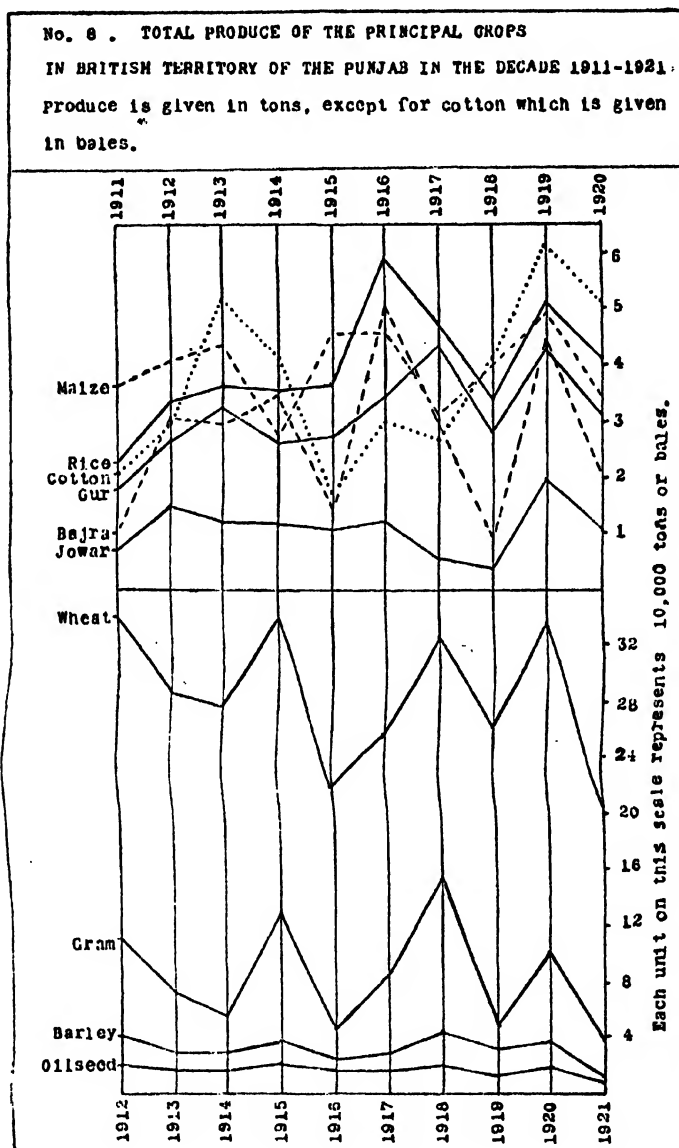
The result of the miserable kharif and good rabi was a total of matured crops for the year only 7 per cent. below average.

1912-13. A wet April assisted the sowing of cane and cotton; a weak and

fitful monsoon which arrived rather late and ceased earlier than usual, was not favourable to kharif crops, but nevertheless the sown area was above average. Irrigated cotton did particularly well, as it usually does in years of little rain, and the season also proved favourable for cane; other kharif crops though showing a marked improvement over the previous year were not good; failure amongst bajra and jowar was extensive and led to a scarcity of fodder in the ensuing cold weather.

The early cessation of the monsoon led to reduced rabi sowings, and an exceptionally dry October and November created rather a gloomy outlook, but later on there were plenty of showers and an average crop resulted.

1913-14 was another normal year without specially marked



characteristics; the early part of the year was wet and led to increased kharif sowings, cotton and jowar were both sown in much larger quantities than usual. The early part of the monsoon produced copious precipitation but August was an exceptionally dry month and the monsoon withdrew completely in September. Cotton and cane did remarkably well, but jowar and bajra failed badly; the harvest was in general good in the west but poor to bad in the south-east; this accounts for the low outturn of jowar and bajra which are more extensively grown in the south-east than elsewhere; their failure again led to cold weather fodder scarcity in this part of the province. In spite of the early cessation of the monsoon, which interfered with the working of inundation canals, the heavy rains before August left the ground so moist that in the west the rabi sowings were in excess; but elsewhere they were restricted and the sown areas and produce of the spring staples fell off considerably.

The year 1914-15 was marked by an early monsoon which gave excessive rain in July and again in the latter part of September, but suffered a prolonged break in August. Sown areas were again above the average but there was a

decline in cane and cotton as the ground was dry at the time these two crops had to be put down, whilst the low price of cotton in the previous year also tended to prevent wide sowings. The heavy rain in July did much damage to maize, the out-turn of which was poor; the south-east part of the province suffered most from the August break and once again the jowar crop was a bad one; bajra which was more advanced at the time of the break did not suffer and did better than in the previous year. On the whole the kharif crop was more successful than in the preceding year, but maize, cotton and sugar were produced in much smaller quantities.

Early winter rains combined with the moisture in the soil from the down-pours of September encouraged wide rabi sowings; more rain than usual in February and March were favourable to the crops, and, except for rather unsettled weather at harvest time, the season was particularly good and resulted in the largest sown and matured areas ever recorded; a noticeable feature of the season was the enormous rise in the production of gram, this due to the fact that extension of sowings are almost always in unirrigated lands as the cultivation of irrigated lands is not subject to much fluctuation.

Two fair years and a good one had placed the farming community in a strong position when 1915-16 opened, and it was fortunate that this was so for it turned out to be a trying year with two bad harvests.

The country was dry at the time of kharif sowings and very small areas were brought under cultivation in unirrigated tracts; a scanty and ill-distributed monsoon, which was 41 per cent. in defect in the aggregate, caused widespread failure amongst all crops; the Himalayan and Sub-Himalayan tracts however escaped the general misfortune; all crops except maize showed a great falling off in sowings, and all except rice, maize and sugar fared badly and produced little, the three exceptions being crops which are most widely grown in the two tracts which escaped the general failure of the monsoon. Cotton sowings were restricted even more than others, the continued low price caused by war conditions prejudicing this crop.

A thoroughly bad kharif did not destroy the optimism of the farmers, and, in spite of the bad monsoon, two periods of rain in September enabled them to sow rabi crops almost up to the normal extent. The sub-soil water was low, rivers were low and canals were running under difficulties; all depended on the winter rain and this proved to be very scanty with the result that failure was very heavy, practically one-quarter of the sown area failing to mature at all whilst the outturns on the matured areas were unusually poor.

The year was a trying one, but the peasantry stood it well thanks to their prosperous condition when it opened; in the south-east, which had failed to participate to the full in the good fortune of the previous three years, the pinch was felt most and some slight distress made itself felt.

Conditions looked gloomy when 1916-17 opened, but some rain in June improved matters and helped cotton and cane sowing. The monsoon started in the latter half of July and gave very heavy precipitation throughout August; it slackened off again in September and finished up by giving very heavy rain in the beginning of October; it was very much more heavy and prolonged than usual. Kharif sowings leapt up, maize which had been widely sown the previous year showing less increase than others, and cotton also did not share to the full in the extension. The heavy rains proved beneficial to the kharif crops, but were rather too heavy for jowar whilst the cotton crop was a very variable one; in the result excellent yields were given by all crops except jowar, and all except this and maize and cotton showed a very much greater production than in the previous year; this undoubtedly proved the best autumn cropping season in the decade. The heavy monsoon left conditions excellent for the rabi sowings, which did not fall far short of the records of 1914-15; all rabi crops shared in the widely extended sowings, particularly gram; yields were good, but that of wheat was moderate and the total produce of this crop did not show so much increase as might have been hoped from the extension in sowing.

The year which followed, 1917-18, was a curious one full of contradictory features. The early spring was dry but rains in April and May led to an extension of cotton and cane sowings; the monsoon started on the 2nd June and was continually active till it withdrew on the 25th September; its early start, and its extreme violence caused floods and prevented kharif sowings, and the area

under all crops except cane and cotton fell considerably. The season was one of such continuous rain that all crops except cane suffered more or less severely, and the produce of all except this one crop fell.

The continuous rain gave no opportunity for careful tillage before the rabi sowings, but the moisture in the ground was so excessive that a large area of very hastily prepared land was sown and the total area under crops was far in excess of that in any other year in the decade; a dry winter did no harm and the amount of failure was small, hence the matured area for the crop was very far above normal—so much so that in spite of the poor kharif the cropped area of the year was a record beating even that of 1914-15. Yields however were not good, due partly to the fact that the heavy monsoon and its accompaniment of a severe epidemic of malaria prevented careful preparation of the ground and also the usual attention which is paid to the growing crops. As regards total produce the year was most disappointing; all kharif crops except cane showed a marked decline, and though the produce of rabi crops was far above normal only those of gram and barley exceeded the figures registered in 1915 and again in 1920, in both of which years the matured area was less than in this year. On the whole the year was good but disappointing, huge areas of matured crops producing yields of very moderate amount.

1918-19, the black year for India owing to the wave of disease which swept the country at the end of 1918, was also a black year agriculturally for the Punjab. Light rains in March and April assisted the sowing of cane and cotton, but the areas did not reach those of the previous year. The monsoon gave no rain except fitful showers in June and was much in defect throughout July; it improved during the first half of August and then gradually withdrew completely ceasing at the beginning of September, and altogether it only gave half the normal rainfall. As a result of the drought kharif sowings were very much restricted and the sown crops suffered badly, the produce of all crops except cotton fell off very markedly, that of bajra being particularly low. October and November were hot and dry, rivers were low, inundation canals started running late and left off early, and even the perennial canals carried much less than the usual supply; conditions were thus most unfavourable for rabi sowings and the influenza epidemic still further restricted them so that the sown area dropped to only 79 per cent. of its average for the decade, but as the major portion of this area was irrigated there was not a great deal of failure except in the south-east of the province.

Both harvests were very poor, the kharif approximating to the wretched one of 1911 whilst the rabi was the worst, except for that of 1921, in the whole decade; the matured area for both harvests together was the lowest recorded during the decade. The only crops which did not do badly were cane, cotton and maize, most of which were either irrigated or grown in the Himalayan and Sub-Himalayan tracts which were not quite so rainless as the rest of the province.

By the end of the year the agricultural community in the Ambala Division and in the Dera Ghazi Khan District were reported to be suffering from the adverse conditions; cattle had suffered throughout the province; war conditions and a closure of goods traffic owing to railway strikes still further affected the situation and there were few breaks in the general gloomy outlook. Prices were high owing to the reduced cropping and an increased demand for export, but there was insufficient surplus grain for this to benefit the smaller proprietors.

In 1919-20 the monsoon gave heavy rain for two months commencing in the middle of July, and there was showery weather both before and after it. October and November were unfortunately dry and restricted the rabi sowings, but all sown areas of both seasons showed large increases over the preceding year though they were not abnormally high; failure was lighter than usual and the yields were very much better.

Excessive heat in the early summer melted the snows rapidly and the monsoon, though short, was heavy; the rivers therefore ran at a high level and the inundation canals had full supplies.

The figures for area indicate a good year not far above normal, but reference to diagram number 8 shows that the ultimate produce of both harvests was exceptionally good; probably this was the best year of the decennium though

the figures for area disguise the fact and point to 1914-15, 1916-17 and 1917-18 being better.

1920-21 marked a return to the agricultural conditions of 1918-19, rain was lacking throughout the year and canals suffered from the lowness of the rivers. The monsoon set in late in June but was very weak except in the south-east and in the Himalayan and Sub-Himalayan tracts; throughout the next three months it was greatly in defect and it was followed by a rainless autumn.

The kharif sowings were not restricted as much as might have been expected, but failure was very heavy; the rabi sowings were the lowest recorded for over ten years and the small area sown had a higher percentage of failure than in any other year. The rabi crop was the poorest recorded for many years and the kharif was comparable with those of the bad years 1911, 1915 and 1918.

The year was one of mild distress; resort had to be made to suspensions and remissions of revenue and to the granting of concession carriage rates for fodder; famine test works were opened in Hissar, and, though they proved to be unnecessary, this fact marks a nearness to famine conditions which had long been unknown in the Punjab.

The decade since the last census thus consisted of four good years, three moderate ones and three bad ones; but it is useless to attempt to compare cropping and produce returns with those of former decades as cultivation in the Punjab has not yet attained a state of equilibrium and its constant extension renders the comparison of the results of years separated by any considerable period useless as a test of the conditions of such years.

The decade has been free from famine, and straitened conditions have only been experienced in the south-east which did not share equally with the rest of the province in the good years.

The diagrams attached to this paragraph do not indicate that the fluctuations in cropping are making any progressive change, all can be traced to the nature of the seasons and to temporary price conditions; no crops except cotton appear to be gaining at the expense of others, and even with cotton this tendency may be due to the fact that prices were low at the beginning of the decade and improved rapidly towards the end rather than to any permanent disposition to sow it more extensively.

30. The figures for the year 1920-21, when compared with those for 1910

Extension of Cultivation.

Year	Areas in square miles.					Gross cultivated area. (Sown area).
	Irrigated from state canals.	Irrigated from private canals.	Irrigated from wells.	Irrigated from other sources.	Total area irrigated.	
1900 ..	6,631	1,287	6,492	240	14,650	43,587
1910 ..	9,753	802	4,665	316	15,536	46,325
1911-12 ..	10,877	648	5,344	243	17,112	41,107
1912-13 ..	10,978	774	5,628	279	17,659	42,984
1913-14 ..	11,029	745	5,877	270	17,921	42,701
1914-15 ..	11,857	827	5,020	250	17,954	49,556
1915-16 ..	11,632	754	5,633	226	18,245	40,475
1916-17 ..	12,612	814	5,364	265	19,055	49,538
1917-18 ..	12,003	802	4,611	262	17,678	51,356
1918-19 ..	11,767	609	5,982	194	18,552	34,146
1919-20 ..	13,601	765	5,525	310	20,201	45,487
1920-21 ..	13,274	701	6,056	211	20,242	38,377
Decade ..	11,963	744	5,504	281	18,462	44,573

given in paragraph 22, show a decline of 17 per cent. in cultivated area associated with an increase of 30 per cent. in irrigated area, but examination of the figures for intermediate years shows that this comparison does not give a true indication of the changes which have occurred. The actual figures for each year of the decade, together with those which have already been given for 1900 and 1910, are shown in the inset table; they show that the comparison of figures recorded at ten year intervals is not a satisfactory gauge of progress; fluctuations from year to year totally eclipse progressive changes.

It is at once evident that years of favourable rainfall when the sown area is most extended are also years in which irrigation, and particularly that from wells, is restricted; and that well-irrigation is most widespread in dry years when the sown area is smallest; the years 1917-18, 1918-19 and 1920-21 indicate this very clearly. 1900 was a dry year and 1910 was one of good rainfall; the comparison of figures for those years tends to magnify the increase in cultivation and decrease in well-irrigation; this consideration supports the

assertion made in paragraph 22 that by the end of the decade 1901-11 cultivation was nearing its limit of extension rather than that labour was scarce.

If we examine the general trend of the figures throughout the last decade, rather than the figures for the first and last years, it is evident that irrigation from state canals has actually increased by 22 per cent. in the last ten years, that the irrigation from private canals and from wells has remained practically unchanged though varying from season to season, that irrigation from other sources shows a slight regular decrease, and that the total cultivated area does not show any regular extension sufficient to be traceable amidst the fluctuations due to seasonal differences.

During the decade the area irrigated from state canals has permanently increased by about 2,400 square miles without any corresponding increase in the cultivated area of the province; this striking fact is not due to the separation of Delhi with its small area of cultivation which is roughly about 350 square miles and is insufficient to affect the figures.

We have seen that by 1920-21 the three canals opened during the decade were irrigating 2,811 square miles and, as most of the irrigation from the Lower Bari Doab and some of that from the Upper Chenab is of land which was previously uncultivated, it is clear that the cultivated area in settled tracts has, on the whole, declined.

Each decade has shown a rapidly decreasing rate of extension of cultivation outside the areas rendered cultivable by new irrigation; in the last three decades this has been very marked and it is evident that the province has now reached a stage when it can expect no increase in the area under cultivation except by the opening of new canals or the adoption of a different system of agriculture.

Though practicable schemes for still further extending the canal systems of the province are in progress, the problem of conveying available water to available wastes is becoming more and more complicated; the time is already approaching when the whole of the cold weather supply in most of the great rivers will be used for irrigation; storage of the excess waters of the rainy season does not hold out a prospect of providing a means for extending irrigation at a rate bearing comparison with that of the last seventy years; even if all engineering difficulties are overcome the wastes suitable for cultivation under irrigation are not inexhaustible.

Of the three great obstacles to increase in population—war, pestilence and famine—the first was removed directly British Government was established, the last was gradually removed by the growth of communications and of an agricultural surplus, and the second will be reduced as knowledge of even the simplest rules of hygiene spreads amongst the people; all now depends on the maintenance of the agricultural surplus; its existence has depended on the extension of cultivation which in the past has been rendered possible, in cultivable areas, by settled conditions and, in uncultivable areas, by the construction of canals; the first possibility of extension has now been exhausted, the end of the second is in sight; the system of agriculture must be changed so as either to raise more produce from the present cultivated area or to bring under cultivation areas which are at present regarded as uncultivable.

Prices,
Wages and
Agricultural
Debt.

31. There is a very distinct difference between the prices realised by farmers at harvest time and the subsequent prices realised in the larger grain markets; the former reflect the nature of the seasons more, and the demand for export less, than the latter.

The following short account refers to harvest prices:—In 1911-12 the prices of all grains remained high, being assisted by a brisk demand for wheat for export, but that of cotton dropped considerably; in the next year cotton improved whilst wheat went still higher. In 1913-14 cotton and sugar, of which there had been good crops, declined in price; wheat rose slightly and the coarser food grains went up on account of scarcity.

1914-15 was an excellent year for the agricultural community; prices were high except for cotton which suffered owing to exports failing off on account of the war; jowar and bajra fetched high scarcity prices, but, as these are mainly grown for home consumption, this told rather against than for the Punjab peasant proprietor. The next year was one of poor crops and prices rose all

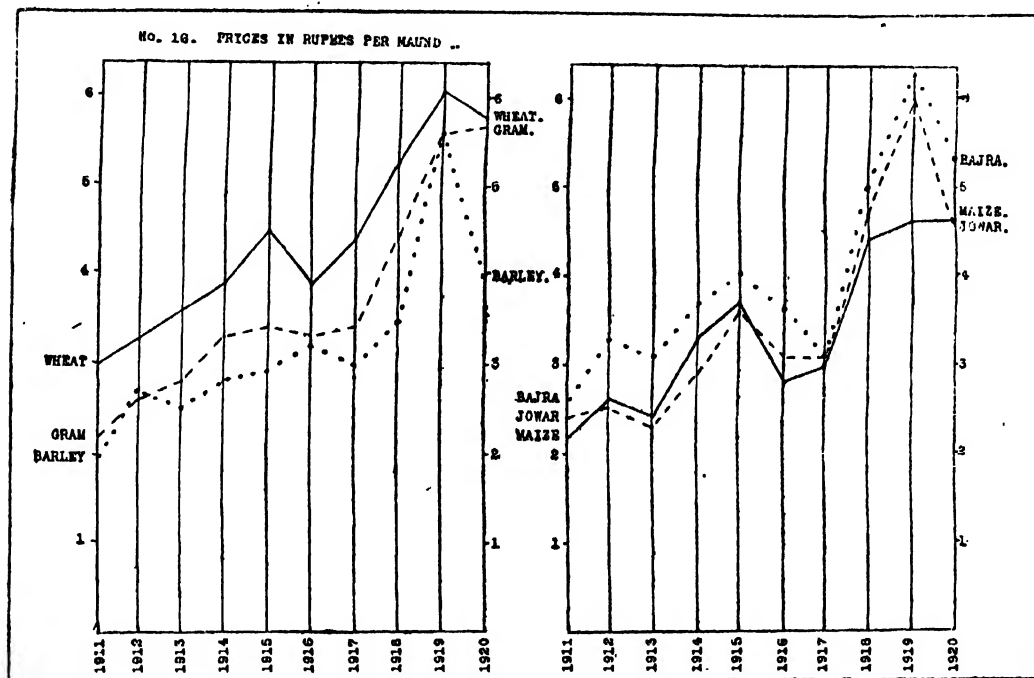
round, that of cotton rose briskly as a demand for export once more asserted itself; in this year complaints about the high wages demanded by agricultural labourers began to be heard and scarcity of labour was, perhaps for the first time, a real handicap to the farmer.

In 1916-17, with the return of good harvests, prices showed a tendency to drop all round, but cotton and wheat were not affected; the year was one which fully restored the position of the people which had been somewhat shaken in the previous year.

A general slight increase in prices occurred in 1917-18 but the outstanding feature of the year was the price of cotton which soared above anything previously known; the next year was marked by high prices caused by poor cropping and an increased demand for export, but there was insufficient surplus grain for this to benefit the smaller proprietors.

In 1919-20 excellent harvests following after a bad year resulted in a general drop in prices, but wages continued to rise rapidly; the bad harvests of 1920-21 forced up prices once more, and they attained the highest general level reached during the decade.

Turning from harvest prices to those obtaining in the principal grain markets of the province which are shown in diagram No. 16, we find a very rapid and practically continuous increase throughout the decade.



The outbreak of war in 1914 caused a sudden rise in prices at the end of that year and this continued the next year and was enhanced by a poor monsoon. In 1916 wheat exports were severely restricted, prices hitherto unknown creating a position of grave anxiety, and a big check ensued; in the following year exports were again restricted but military requirements necessitated a considerable export of wheat and gram and the prices of these two started to rise again. In 1918 and 1919 poor production combined with export for military purposes caused a further rise and in the latter year record prices were reached; in 1920 exports were still under control and good harvests resulted in an abatement of price.

How long the phenomenally high prices reached in the decade will continue after the adjustment of trade following the conclusion of the war it is impossible to foretell, but there is little prospect of prices ever falling to pre-war level and much of the rise must be permanent. The miserable crops harvested in the last year of the decade have since caused the unparalleled position in which India has had to import wheat from Australia and local prices have broken loose from the control afforded by export.

Regular wage censuses have been held in the province in 1909, 1912 and 1917; amongst other statistics available in the reports are the normal daily wages of urban labour in some of the principal cities and the normal daily wages of

rural labour in every district; it is difficult to estimate average wages obtaining in the province from these data but an attempt has been made as follows:—where the normal wages vary between two limits the mean of these has been taken for the unit concerned; in towns this has been multiplied by the number of people in the category concerned and the average worked out accordingly; in rural areas the average of district mean wages has been taken without any attempt to allow for the varying numbers of people concerned in each district. The results are probably of sufficient accuracy to allow comparison of the three sets of wages and have been incorporated in the table reproduced below:—

CLASS OF LABOUR.	DAILY WAGES IN ANNAS.			INCREASE PER CENT.		WAGES EXPRESSED IN MAUNDS OF WHEAT PER MONTH.		
	1909.	1912.	1917.	1909-12.	1912-17.	1909.	1912.	1917.
<i>Urban—</i>								
Iron and hardware	12	16	17.5	33	9	6.0	9.4	7.7
Brass and copper	16.75	10	18	—4½	12½	8.3	9.4	7.9
Carpenters	15.5	18	19.75	16	10	7.7	10.6	8.7
Cotton weavers	4.25	6.25	9	47	44	2.1	3.7	4.0
Masons and builders	15.25	17.25	19.5	13	13	7.6	10.2	8.6
General unskilled	6.25	7	8.75	12	25	3.1	4.1	3.9
<i>Rural—</i>								
General unskilled	5.33	5.5	6.7	3	22	2.7	3.2	2.9
Carpenters	11.5	12.25	15.33	6	25	5.7	7.2	6.8
Blacksmiths	9.75	13.75	14.25	41	4	4.9	8.1	6.3
Masons	12.75	14.75	16.5	16	12	6.4	8.7	7.3
Ploughmen	2.2	4.1	5.5	86	34	1.1	2.4	2.4

The low wages of rural labour and especially those of ploughmen are mainly due to the fact that they are usually accompanied by some payment in kind. In calculating the figures in the last three columns the price of wheat has been taken as Rs. 3-12-0 in 1909, Rs. 3-3-0 in 1912 and Rs. 4-4-0 in 1917.

Variations in wages always show a drag over those in prices, and as the price of wheat was lower in 1912 than in 1909 and 1917 it is natural to find that wages in that year had a comparatively high purchasing value. Without going into minor variations which the accuracy of the figures does not warrant, the table shows that wages have been increasing rapidly and that, except in the case of one class of urban labour, the increase during the period 1909-17 more than compensated for the rise in prices.

Comparison with the figures given in paragraph 22 shows that urban wages and also the wages of unskilled agricultural labour had rather less purchasing power than in the previous decade. It is unlikely that the immense rise in prices since 1917 has been fully reflected in wages and it may be expected that the report of the wage census to be held in 1922 will show a drop in the purchasing power of all classes of wage.

Up to about 1907 the purchasing power of wages had risen steadily, but since then there appears to have been a slight drop and it may be anticipated that the next enquiry will reveal a distinct drop. Turning back to paragraph 10 it is clear that this involves increased gains to the non-working landowner but does not necessarily lead to greater profit for the employer of urban labour; this being so it is reasonable to expect that in the near future agricultural wages will rise at a greater rate than industrial wages.

It is interesting to examine the effect of a decade of rather unfavourable

Year.	Percentage of cultivated area under mortgage.	Area out of every 10,000 acres of cultivated land which was			Average price of cultivated land per acre.
		Mortgaged.	Redeemed.	Sold.	
1911	11.0	69	88	44	129
1912	12.0	74	91	54	123
1913	11.7	79	96	66	107
1914	11.5	88	102	44	249
1915	11.6	83	87	49	180
1916	11.5	82	76	38	216
1917	11.4	78	67	35	227
1918	10.9	69	69	35	252
1919	10.9	72	90	49	184
1920	10.7	90	120	49	275
Mean	11.4	78	89	46	194

seasons and of rapidly rising prices and wages on the economic position of the farmer; the marginal table indicates that that position has undergone slight but steady improvement, the proportion of land under mortgage has steadily fallen, more land has been freed from mortgage than has been mortgaged, and the price of land has risen considerably.

The fact that the first three columns do not agree is due to the fact that the proportion of the total land which has been cultivated has varied from year to year; all the transactions involved in the table covered uncultivated as well as cultivated land.

32. The beginnings of the co-operative credit movement amongst the people of the Punjab were described in paragraph 55 of the last census report.

Co-operative
Credit Soci-
ties.

In 1911 there were four main types of society, two primary and the other two secondary. The usual primary type was an agricultural credit society devoting its energies to advancing money to its members at favourable rates to enable them to pay off old debts and to survive the temporary strain of unfavourable seasons; of these there were then 1,074 societies scattered over twenty-three districts. Original members owned shares in the societies

which they subscribed in instalments over a period of ten years after which the shares were returnable; three-quarters of the profits were divisible amongst members as non-returnable shares and the remaining quarter was indivisible and was to be utilised to form a reserve fund; other sources of working capital were loans and deposits from both members and non-members and from other societies of the same type or from the central banks and unions which will be described below. The available working capital of these 1,074 societies is detailed in the margin and consisted of about 30½ lakhs; of this sum 9½ lakhs were in the form of loans by one society to another and formed part of the working capital of both the loaning and borrowing society, and therefore were counted twice over; it however cannot be called capital of the societies as a whole and omitting this item they worked with a capital of about 21 lakhs of which 16 were owned either directly or indirectly by the members and 5 came from outside sources.

This type of society has retained premier place till the present time; certain modifications have been introduced; for example, during the year 1911 the system of granting Government loans to societies of this type was abandoned as they could exist without this help; in 1916 all members who did not own shares in societies were struck off the rolls, these members having formerly been admitted on a nominal payment but never having been full and useful members of the societies. It was found that with members owning shares of various amounts those who held large shares welcomed high rates of interest for the sake of the profit-sharing thus losing sight of the true co-operative principle, and in 1918 an attempt was made to eliminate the three-quarter divisible share of profits; nearly all the societies formed since then have adopted the principle of indivisible profit and many of the old societies have followed suit.

In 1921 the number of primary societies of this type—"agricultural credit"—was 7,605 scattered over every district of

000's omitted—	Rs.
Share capital	51,72
Loans from members	14,13
Loans from non-members	14,81
Loans from societies	2,07
Loans from central banks	81,28
Loans from Government	37
Reserve fund	51,75
Total	2,16,13

the province and including 196,691 members; the working capital was over 216 lakhs and was made up as shown in the margin; in 10 years the capital has increased from 30½ lakhs to 216 lakhs; that part of it which is not derived from other societies and central banks has increased from 21 to nearly 133 lakhs and whereas in 1911

000's omitted—

Year.	Loans to members.		Recoveries.	
		Rs.		Rs.
1911	..	22,79		10,38
1912	..	35,19		16,72
1913	..	62,55		29,16
1914	..	71,59		39,83
1915	..	36,04		30,82
1916	..	33,25		25,35
1917	..	31,58		33,41
1918	..	33,04		32,49
1919	..	47,40		38,79
1920	..	67,19		19,36
1921	..	52,89		41,72

only 76 per cent. was owned by members now 89 per cent. is so owned. This marvellous advance in members and resources has been accompanied by a steady increase in useful endeavour; the main object of such societies is still the creation of funds to be lent to their members and the amount of loans lent out and recovered each year is noted in the margin (each year ends on 31st July).

It is the principle of these societies to advance loans only for legitimate objects and to encourage

thrift. The objects for which loans have been borrowed have been tabulated for representative societies from time to time; each time this has been done the results have been somewhat similar and the following figures are typical and represent the averages of 1917 and 1918 in the form of percentages of the total money given out in loans:—payment of old debt and redemption of mortgage 25; purchase of cattle 21; payment of revenue 14; marriage expenses 7; household expenses 7; purchase of seed 6; trade 5; purchase of fodder 2; payment of rent 1; repayment of takavi (Government loans) 1; and miscellaneous 11. In 1915 a very interesting summary of some of the work done revealed that the members owed about 72½ lakhs to the societies but that by reason of their borrowings they had paid off at least 82 lakhs of old debt and mortgage and regained possession of over 8,000 acres of land, whilst they had also accumulated savings of 50 lakhs in the societies' funds. Nor did this alone represent their financial benefit, for, by reason of their greater affluence, they had been paying off many old debts from their private pockets without resorting to loans from the societies, and it is estimated that co-operators are now paying off old debts at the rate of twenty lakhs per annum. Apart from the main object of creating funds from which to provide credit the societies brought into being a corporate feeling which could be directed by the leading members with the result that at various times they have launched out into other branches of work, amongst which may be noted the purchase and distribution of improved implements and of improved seed, the sale on commission of agricultural produce resulting in selection and grading of produce and encouragement to plant good seed; the corporate spirit has also led to a desire for education, funds have been provided for scholarships and for school buildings and dispensaries; the inspecting staff has received training at agricultural colleges which they pass on to the members, members themselves have sent representatives to agricultural courses, and demonstrations of scientific methods of agriculture have been arranged in the villages; it has further led to joint social endeavour in the direction of restricting marriage expenses and other extravagant expenditure, and of submitting disputes to arbitration.

These varied interests have led to the formation of societies which are not

CLASS.	No.	NUMBER OF MEMBERS.	
		Individuals	Societies.
Purchase and sale	171	1,537	1,845
Production and sale	19	597	191
Arbitration	87	10,299	..
Consolidation of holdings	60	1,698	..
Night schools	45	784	..
Silt clearance	3	49	..
Reclamation of Cho waste lands	8	371	..
Thrift and savings	2	37	..
Cattle and sheep breeding	11	204	..
Irrigation	1	16	..
Cattle purchase	2	92	..
Cattle insurance	37	529	..

primarily credit societies and which have not been included in the figures given above; figures for these are given in the margin; they are all societies of agriculturists and have all grown out of the primary form of society of which there were 1,074 in existence in 1911. The objects for which they work are indicated by their titles and they are working for the good of their members in many subsidiary ways. Members of these specialised societies are probably nearly all of them members of credit societies as well, so that we must not add them to the numbers of agricultural co-operators; and taking 196,691 as the number of members of agricultural credit societies and

noting that about 80 per cent. of the societies are amongst Musalmans, we find that one in every 20 persons actively engaged in agriculture and one in every 13 agricultural Musalman workers belong to co-operative credit societies;* and from being a benefit to a few selected progressives in 1911 the movement has become one of general application affecting the whole of the agricultural life of the province.

So far we have dealt only with agricultural credit societies and their present day descendants. The other primary societies existing in 1911 were described as urban, and of them there were eleven, four of which were purely "*credit*" societies, two "*credit combined with produce and sale of stores*" and five "*industrial*" consisting of four weavers' societies and one blacksmiths'. The co-operative movement in non-agricultural circles is necessarily more varied though less extensive than amongst the agricultural classes. These eleven societies marked the beginning of a movement which has led to the formation by the end of July 1921 of 303 societies of which 57 are amongst weavers; they include 116 "*credit*" societies and 180 "*purchase and sale*" societies; their aggregate capital is shown in the margin, and they have 15,371 members.

000's omitted—	Rs.
Share capital	3,13
Members' loans and deposits	1,78
Non-members' loans and deposits	52
Loans from societies	48
Loans from central banks	1,81
Reserve fund	99
	<hr/> 8,74

This form of co-operation has not captured the imagination of the people whom it helps to the same extent as the agricultural credit system; many societies have been formed and have been dissolved owing to lack of interest and the true co-operative spirit; industrial societies have needed much supervision to render them successful; but gradually types suitable to each class are being evolved and the existing societies are the results of a process of survival of the fittest and are doing an immense amount of good work; amongst the credit societies may be mentioned societies amongst employees of the North-Western Railway, the Telegraph Department, the Punjab Civil Secretariat, the Dhariwal Mills, and of various Municipalities and District Boards, but the multiplicity of detail is too great for a full exposition here. This completes a short analysis of the primary societies and we must now turn to the secondary societies which exist to supply capital and to organize the efforts of individual primary societies; these are of four main forms, the Central Banks and Unions; the Supply Stores and Supply Unions; the first two are large credit societies that transact business with the primary credit societies, supplying them with capital in the form of loans and accepting deposits and loans from those which have surplus capital to dispose of; besides supplying their own capital in the cause of co-operation they pool the capital of the primary societies and enable them to help each other in a way they could not do by themselves.

Members of the central banks include both individuals and societies and since 1916 at least half the shares issued have been reserved for societies; on the other hand the union is an association of societies only and has no individual members. The share capital of the central banks is transferable but not returnable and the liability is limited by shares; these banks pay a dividend on shares whilst the profits of a union are indivisible. The rival advantages of the two forms of secondary society are difficult to estimate; the central bank is possibly more efficient in providing loans for it controls outside capital, but on the other hand the desire for dividends may lead to an unduly high rate of interest; the union is not affected by the greed of profit sharers and its supervision is much more efficient. The same difference which exists between central banks and unions differentiates Supply Stores and Supply Unions; the former include individuals amongst their members and the latter do not. The former exist only in towns and have achieved little success, societies which are members of them are leaving them and seeking to join supply unions instead; here again the defect of the supply stores is found in the selfishness of individual members.

These large banks and unions control a large amount of credit and have inspired confidence to such an extent that they are able to obtain large cash credits from the Bank of Bengal and other financial corporations. The progress amongst

* Note.—In Punjab British Territory the number of actual workers whose main employment is agriculture is 3,860,900 and the corresponding figure for Musalmans is 2,092,574.

central banks and unions is exhibited in the following table :—

		CENTRAL BANKS.		UNIONS.		WEAVERS' CENTRAL STORES AND SUPPLY UNIONS.	
		1921.	1911.	1921.	1911.	1921.	1911.
Number	..	31	8	63	1	4	0
Number of members.	} individuals ..	2,063	577	0	0	0	0
	} societies ..	4,873	0	1,942	63	85	0
000's omitted	Share capital ..	11,50	1,28	1,78	7	3	0
	Loans from individuals ..	52,53	4,24	9,37	90	26	0
	Loans from central banks ..	18,42	6	10,56	11	1,47	0
	Loans from societies ..	8,58		10,32		2	0
	Loans from government ..	35		30		18	0
	Reserve funds ..	3,92	1	95	0	14	0
	Working capital ..	95,30	5,59	33,28	1,08	2,10	0
	Year's profit ..	2,32	15	27	1	0	0

The co-operative movement at first caused widespread opposition from the money-lending classes but it is now an accepted fact and open opposition is rare ; its existence in many cases has led to a reduction of the money-lenders' rate of interest. The first few years of the last decade were ones of rapid expansion and enthusiasm. The financial crisis which occurred in 1913 following on the closing of the Peoples' Bank in September of that year, followed by the outbreak of war, resulted in widespread contraction of credit ; the co-operative societies suffered considerably but there was no such run to withdraw deposits as in the case of ordinary banks and the Post Office Savings Bank. The period 1914-1917 was however necessarily one of consolidation rather than expansion ; the central banks in order to meet an anticipated withdrawal of deposits were unable to loan all the requirements of the primary societies ; a succession of poor harvests combined with war conditions strained the banks to their utmost, and in some cases members had to resort once more to the village money-lenders. On the whole the societies survived splendidly and the lull in expansion was made an opportunity for cancelling unsuccessful societies and removing undesirable members, so that by 1918 the co-operative movement was once more expanding rapidly with a body of members purged of undesirables. Since then progress has been continuous, and much as the movement has benefited the Punjab in the past this is nothing to what may be hoped for in the future.

Joint Stock Companies.

33. The history of joint stock enterprise during the past decade is of interest in indicating several features of the commercial and financial life of the province. At the time of the last census there was a boom in companies of doubtful character ; ignorance of business methods amongst the promoters, and still more a well-founded belief in the ignorance and credulity of those who would be their creditors and clients, led to the flotation of numerous hopeless ventures. The following statement shows the number and capital of companies in existence on the 31st March each year. It also shows similar details for the new companies registered and for companies which ceased to work in each year :—

YEAR.		NEW COMPANIES REGISTERED.				COMPANIES WHICH WERE LIQUIDATED OR OTHERWISE DISSOLVED.				COMPANIES EXISTING AT THE END OF THE YEAR.			
		Capital 0000's omitted.			No.	Capital 0000's omitted.			No.	Capital 0000's omitted.			No.
		Nominal.	Subscribed.	Paid up.		Nominal.	Subscribed.	Paid up.		Nominal.	Subscribed.	Paid up.	
1910-11	..	..	..	..	..	..	..	..	149	5,80	2,77	1,86	..
1911-12	..	57	64,7	4,8	1,7	12	28,2	1,6	1,0	194	6,23	2,91	1,94
1912-13	..	23	88,7	1,0	3	44	87,5	16,7	4,3	155	6,30	2,67	1,67
1913-14	..	21	2,02,6	7,8	1,4	31	1,07,6	49,3	21,0	146	7,58	2,68	1,62
1914-15	..	6	39,2	0	0	52	4,03,2	72,1	25,6	99	4,43	2,14	1,50
1915-16	..	5	3,4	9	5	16	40,1	17,7	7,6	88	4,08	1,99	1,47
1916-17	..	8	1,28,4	55,5	55,2	16	86,7	5,2	2,1	80	4,91	2,68	2,19
1917-18	..	7	13,5	1,0	1,0	4	19,5	9,3	7,9	83	5,46	3,08	2,62
1918-19	..	0	0	0	0	8	23,7	15,1	14,6	76	5,24	3,63	3,17
1919-20	..	9	86,9	12,2	6,2	6	18,1	7,6	7,0	79	5,95	3,82	3,25
1920-21	..	23	1,37,9	19,2	4,9	5	10,7	7,2	3,2	97	7,59	4,39	3,55

Note.—In 1912-13 eighteen companies were transferred to Delhi and in 1914-15 one company was transferred to Bombay ; in 1913-14 one company was transferred from Delhi and in 1918-19 one company from the North-West Frontier Province.

It will be seen that during the first year of the decade the rush to found new companies continued and in the next two years, in spite of a large number of failures, many new companies were founded; in 1914-15 however a record number of failures was accompanied by practically no new enterprise. The number of companies continued to decline until 1919, since then there has been some increase. The capital invested in these companies has not decreased at the same rate as the number of companies; in fact, since 1916 capital of all classes has shown a steady increase. The reason for this is that companies which have failed were in many cases petty concerns with small nominal capital of which very little was paid up. The companies which have survived throughout the decade have been of a more satisfactory type with a larger capital of which a far larger proportion is paid up. In 1911, of the total nominal capital of 580 lakhs, only 48 per cent. was subscribed and 32 per cent. paid up; but in 1921, of the nominal capital of 759 lakhs, 58 per cent. was subscribed and 47 per cent. paid up. At the time of the last census an objectionable feature of joint stock enterprise was the flotation of a large number of provident societies of a fraudulent type; in 1911-12 no less than 36 societies of this type were floated whilst in the following year 27 came to grief; at the same time banking enterprise of unsound nature was rife, and miscellaneous trading companies with insufficient resources were also being floated in large numbers. In 1913-14 the existence of the unsound banking businesses ended in disaster, 10 banks with paid up capital of 19 lakhs closed their doors, amongst them the Peoples' Bank with a paid up capital of 12½ lakhs; in the following year 19 more banking companies failed and, as a result of the damage to the finance and credit of the community, 22 trading companies also came to an end. These failures were inevitable on account of the unsound nature of the companies concerned, but they were expedited by the stringency caused by war conditions and their numbers were added to on account of the greater regulation of joint stock enterprise following on the passing of the Companies Act of 1913. The effects of the crisis lasted throughout the decade, but by 1916-17 most of the totally unsound companies had vanished and of the 80 companies on the registers 78 were reported to be engaged in active business. In this year the Trust of India, the Associated Hotels and the Banyan Trust were all floated with a large capital of which a large proportion was paid up, and in the following year these firms and the Alliance Bank of Simla, all of which are connected with one large English firm of bankers, increased their capital; the large increase of capital in these two years shown in the statement was entirely due to English enterprise and the paid up capital of Indian firms actually decreased. The next two years, though producing few new companies, were years in which the existing companies were extremely active. The year 1919-20 showed a revival of joint stock enterprise, in that a large number of new companies were formed and capital was increased all round; it should be noted however that the Registrar of Joint Stock Companies stated that though there had been an increase in the number of new companies floated there was little sign of any growth of healthy joint stock

Nature of company.	No.	CAPITAL 0000's OMITTED.		
		Nominal.	Subscribed	Paid up.
Banking and Loan .. { 1911	29	2,22,0	1,19,4	65,4
.. { 1921	25	5,05,5	2,91,9	2,25,3
Insurance .. { 1911	14	71,7	2,3	2,8
.. { 1921	4	30,0	16,7	5,0
Transport .. { 1911	1	1,0	1,0	3
.. { 1921	4	9,5	2,0	2,0
Trading and Manu- { 1911	58	89,6	28,5	21,0
facturing .. { 1921	44	1,07,2	36,8	25,5
Mills and Presses .. { 1911	34	1,30,4	82,4	73,2
.. { 1921	9	21,3	16,3	15,2
Mines and Quarries .. { 1911	4	28,7	4,4	3,3
.. { 1921	2	3,3	3,1	3,1
Land and Buildings .. { 1911	3	8,5	9	3
.. { 1921	2	1,5	2	1
Breweries .. { 1911	1	18,0	18,0	18,0
.. { 1921	3	32,9	32,9	32,9
Sugar .. { 1911	2	4,5	1,6	1,6
.. { 1921	2	8,0	6,6	4,8
Others .. { 1911	3	5,7	4	1
.. { 1921	2	70,0	48,4	45,7

enterprise. The marginal statement shows the nature of the companies existing in 1911 and in 1921. The most important of these are banking and loan societies. During the decade 37 new banks were started and 42 dissolved. No less than 23 were floated in the first three years of the decade whilst 29 failed in the two years 1913-14, 1914-15. Those existing in 1921 are on a much more satisfactory basis than those of 1911; about 45 per cent. of the nominal capital is paid up, whilst of the 42 banks which failed, less than 10 per cent. was paid up. Insurance societies, which numbered 14 in 1911 and are now reduced to 4, included the fraudulent

provident societies which have been mentioned above; 38 societies have been floated and 44 dissolved during the decade, whilst others have now been classified under other heads. Of the 44 societies dissolved, 22 existed for less than 12 months and 14 for less than 2 years; they had nominal capital of 71 lakhs of which only 4 lakhs was paid up; the province is well rid of such questionable businesses. The number of trading companies shows a decline from 58 to 44 in the 10 years, but during that period no less than 63 companies were registered while 70 failed, indicating the unhealthy state of joint trading ventures. The decline in joint industrial enterprise is most marked; 34 mills and presses existed in 1911 whilst only 9 remained in 1921; this is partly due to the registering centre of several such companies being transferred to Delhi, but the Punjab returns show 24 such companies which have been wound up; these 24 companies had a nominal capital of 97 lakhs of which 29 were paid up. The existing companies have a nominal capital of 21 lakhs of which 15 are paid up and include many sound and prosperous concerns. To sum up we may say that the past decade has been one of evident disaster for joint stock effort amongst the Punjab population; the wave of optimistic investment and fraudulent flotation in the early years led to a shaking of credit and a disruption of trade from which the province has not yet recovered; joint stock enterprise is therefore a subject of distrust, which prevents it from taking its proper place in financial and industrial expansion. Though the existing companies are mainly on a sound basis many of the largest and soundest of them are not indigenous but owe their capital and management to European firms.

Trade.

34. The main trade of the Punjab and Delhi is carried on by rail and river

Year.	Exports.	Imports.
1911-12 ..	2,763	3,001
1912-13 ..	3,202	3,176
1913-14 ..	3,411	3,159
1914-15 ..	2,758	3,123
1915-16 ..	3,129	3,363
1916-17 ..	3,390	3,429
1917-18 ..	3,864	3,852
1918-19 ..	5,225	5,058
1919-20 ..	4,405	5,287
1920-21 ..	3,946	6,142

Average net exports.

Average net imports.

Wheat ..	877	Cotton goods ..	1,059
Raw cotton ..	494	Sugar ..	446
Gram and pulses ..	492	Metals ..	261
Oilseeds ..	112	Coal and coke ..	139
Hides and skins ..	74	Jute ..	136
Wheat flour ..	67	Provisions ..	87
Wool ..	38	Oils ..	85
Jowar and bajra ..	7	Wooden goods ..	78
		Apparel ..	51
		Dyes and tans ..	29
		Spices ..	27
		Drugs ..	25
		Net Total ..	350

MAIN DIRECTIONS OF TRADE.

To or from	Exports.	Imports.
United Provinces ..	640	834
Rajputana ..	254	173
Bombay ..	135	187
Sind ..	181	123
Bengal ..	15	199
Kashmir ..	21	73
Ports of—		
Madras ..	25	15
Bombay ..	461	645
Karachi ..	1,559	963
Calcutta ..	181	496

with other parts of India or with foreign countries through the ports of Karachi, Bombay and Calcutta; the weight and value of the imports and exports are registered on the railways and at river posts, the value is in many cases arbitrarily assigned and must not be taken to be more than a rough guide. The total imports during the decade, figures showing the average net import or export of the main articles of trade, and others showing the direction of the main streams of trade are given in the margin; all these figures are in lakhs of rupees. In the previous decade both imports and exports had more than doubled, in this decade imports have increased steadily and have again doubled, but exports have fluctuated and at the end of the decennium only exceeded their initial value by about fifty per cent. Until the end of 1918-19 exports and imports tended to vary together and the balance of trade was first on one side and then on the other, the total trade for the first eight years showing an adverse balance of only 419 lakhs against the Punjab, an insignificant sum well within the margin of error due to unregistered trade and to the arbitrary values assigned to registered goods; in the last two years however the balance of trade was against the Punjab to the extent of 882 and 2,196 lakhs.

The registered movements of gold and silver show an annual average net import of 530 lakhs; so that as far as any record exists the unfavourable balance of trade is not met by export of treasure, and indeed it is well known that the province absorbs vast quantities of gold and silver which disappear from circulation and yet are not exported. It seems to follow that during the last two years of the decade the province was living on credit and that unless there is a

great expansion in export there will be a diminishing import in the near future.

The steady increase in imports indicates a steady increase in prosperity and in the general standard of living, they have doubled in ten years and quadrupled in twenty whilst the increase in the number of people for whom they are imported has only been about three per cent. in twenty years.

That exports have failed to keep pace with imports is due to the fact that they consist almost entirely of agricultural produce dependent in amount on the nature of the seasons, combined with the definite governmental control on exports which was instituted during the war in an attempt to check the advance in prices of food. Every single article that has any considerable net export is a direct product of the soil, and the bitterest opponent of Malthusian principles would hesitate to maintain that a trade which doubles itself every ten years can be made up entirely of agricultural produce on the export side. The trade of the Punjab has been rendered possible in the past by the vast extension of cultivation and irrigation; it may be rendered possible for a short time in the future by further extensions and by increased yields due to the spread of more scientific agricultural methods; but the time is rapidly approaching when imports must be replaced by more local manufacture if the standard of living is to continue to rise.

The nature of the principal imports indicate the needs of society in a simple state, and also show at once the main directions in which industrialism should be directed to meet the needs of the province.

In connection with the figures for trade with particular places, it should be noted that the balance of trade with foreign countries through the ports of India is in favour of the province, whilst that with other parts of India is heavily against it. In so far as imports of manufactured goods are concerned, it is more hopeful for the Punjab that the adverse trade balance should be with India than with foreign countries, for it will be easier for it to substitute its own manufactures.

A small volume of trade passes over well defined routes leading to Afghanis-

AFGHANISTAN.			<i>Imports.</i>	<i>Exports.</i>
1911-12	..	..	37	23
1912-13	..	..	67	151
1913-14	..	..	58	71
1914-15	..	..	15	51
1915-16	..	..	27	185
1916-17	..	..	25	85
1917-18	..	..	27	598
1918-19	..	..	32	61
1919-20	..	..	28	110
1920-21	..	..	109	254

CENTRAL ASIA.			<i>Imports.</i>	<i>Exports.</i>
1911-12	..	..	179	121
1912-13	..	..	357	187
1913-14	..	..	1,095	1,737
1914-15	..	..	877	1,497
1915-16	..	..	1,141	1,329
1916-17	..	..	1,022	1,210
1917-18	..	..	1,342	2,069
1918-19	..	..	1,532	3,793
1919-20	..	..	1,091	4,257
1920-21	..	..	2,046	4,400

TIBET.			<i>Imports.</i>	<i>Exports.</i>
1911-12	..	..	248	50
1912-13	..	..	367	48
1913-14	..	..	426	31
1914-15	..	..	318	37
1915-16	..	..	427	32
1916-17	..	..	585	50
1917-18	..	..	579	29
1918-19	..	..	605	18
1919-20	..	..	581	38
1920-21	..	..	660	36

CENTRAL ASIA.			<i>Imports.</i>	<i>Exports.</i>
Raw silk	..	56%	Cotton piece-goods	.. 48%
Charas	..	31%	Manufactured silk	.. 14%
Raw wool	..	8%	Paints and colours	.. 9%
Live animals	..	2%	Hides and leather	.. 8%
			Indigo	.. 7%
			Tea	.. 3%

tan, Central Asia and Tibet; imports and exports are registered at trading posts and the total value of these in thousands of rupees during the last decade is shown in the margin; the total amount is so small that its effect on the resources of the province is negligible, and the nature of the articles included in it indicates the impossibility of any great expansion.

Of the imports from Afghanistan no less than 62 per cent. have been in fruit, vegetables and nuts whilst the only other items of importance have been ghi, hides, and skins, raw wool and drugs; the exports have consisted of 25 per cent. manufactured leather goods, 25 per cent. Indian cotton piece-goods, 18 per cent. English cotton goods, and small quantities of rice and iron.

The registration of trade with Central Asia was only placed on a satisfactory basis in 1913-14 and for the last eight years of the decade the principal merchandise imported and exported

(i)

was as shown on the left; the imports of raw silk and of charas are by far the most important and supply a considerable proportion of the quantities available in the provincial markets; amongst exports it is sad to note that less than one-fifteenth of the cotton piece-goods are manufactured in India.

Eighty per cent. of the imports from Tibet consist of raw wool whilst borax accounts for another eight per cent., the only other imports of any size are of live animals and salt; the exports are negligible.

Industrial
Development.

35. The following table, which refers to the Punjab and Delhi together

Nature of employment.	Percentage of total.		Increase per cent.
	1911.	1921.	
Exploitation of animals and vegetables ..	60.0	59.9	5.7
Extraction of minerals ..	0.1	0.1	—36.2
Industry ..	20.3	19.5	1.4
Transport ..	2.9	2.0	—27.0
Trade ..	6.5	7.0	13.5
Public Force and Administration	1.7	1.7	5.7
Liberal Arts and Professions ..	2.5	2.2	—8.2
Domestic Service ..	2.1	2.6	30.5
All others ..	3.0	5.0	38.2

and has been compiled from the occupational tables for 1911 and 1921, shows that the number of persons dependent on industry has not increased so fast as the total population and that, in consequence, the proportion of the former to the latter has dropped from 203 to 195 per mille.

As the industrial community is largely composed of village artisans, who follow their hereditary occupations irrespective of the demand for their services, very little weight can be attached to the figures and, though it is

clear that there has been no effective demand for increased industrial labour, it need not be concluded that the industrial life of the provinces has suffered a reverse.

On the other hand the figures for the number of factories and other industrial establishments employing twenty or more people show a considerable advance in the organised industry of the two provinces; in 1911 these numbered 443 and employed 49,324 operatives whilst by 1921 they had increased in number to 538 and were employing 62,424 persons. The persons employed in these establishments mainly fall within the occupational groups "Extraction of minerals" and "Industry" in which there were 1,802,752 actual workers engaged in 1921; hence in these particular occupations there is only one man employed in these establishments to every twenty-nine who either work by themselves or in small groups of less than twenty; the advance in factory production, though considerable, is not such as to have any appreciable effect on the population in general or the industrial community in particular.

Communi-
cations.

36. Owing to the war and to financial stringency the decade has been one in which the communications of the province have undergone little extension. Railway requirements in Mesopotamia and other Eastern war areas were supplied almost entirely by the Indian Railways, which depleted their staff, plant and rolling stock and even tore up some of their permanent way in a magnificent effort to meet the necessities of the military authorities.

Economic conditions led to serious strikes on several of the railway systems of the country including the North-Western Railway which had to reduce its services of passenger traffic and entirely discontinue goods bookings for certain periods; a serious shortage of coal, due to strikes in the mining centres and to shortage of rolling stock required to import it into the Punjab caused even more serious interruptions in traffic facilities.

With their attention entirely devoted to supplying military demands and to maintaining their home services with as little interruption as possible, the authorities could not attempt to carry out any but the most urgent construction within the province, with the result that only 487 miles of new branch lines were opened during the decade, whilst in 1917 the Sutlej Valley Railway from Kasur to Lodhran with 208 miles of track was dismantled to provide permanent way material for military lines. The new lines, of which those affording increased

communications in the Ferozepore, Jullundur and Hoshiarpur Districts are the most important, are shown below :—

1.	Shorkot Road to Jaranwala	..	..	88	miles opened in	1911.
2.	Khanpur to Chachran	..	..	22	"	1911.
3.	Jakhal to Hissar	..	..	50	"	1913.
4.	a. Lohian to Phillaur via Nakodar	..	..	39	"	1913.
	b. Jullundur City to Hoshiarpur	..	..	23	"	1913.
	c. Ferozepore Cantonment to Jullundur City via Lohian and Kapurthala	..	..	72	"	1912-14.
	d. Nakodar to Jullundur City	..	..	19	"	1914.
	e. Jullundur City to Mukerian	..	..	45	"	1915.
	f. Phagwara to Rahon via Nawashahr	..	..	26	"	1915.
	g. Nawashahr to Jaijon	..	..	19	"	1917.
				243	"	1913-17.
5.	Sialkot to Narowal	..	..	38	"	1915-16.
6.	Mandra to Bhaun	..	..	46	"	1915-16.

In addition to the construction of these 488 miles of new line, the Railway system was vastly improved by the doubling of the line from Ambala to Lahore and from Lahore to Raewind which was completed during the decade.

Between 1911 and 1920 the mileage of metalled roads rose from 2,619 to 2,937; the whole of the increase was in roads maintained by local authorities and mainly consists of short stretches of road serving local markets and railway stations. Little has been done to extend the system of through road communications, but a great deal of improvement has been effected on the one great road of the province; as a result of the doubling of the railway line from Ambala to Lahore the old railway bridges over the Sutlej and Beas were abandoned and these have been converted into road bridges; a road bridge has been constructed over the Ravi to replace the old bridge of boats, and another over the Chenab at Wazirabad was under construction at the time of the census and has since been opened for traffic; works of less magnitude have overcome the temporary dislocation of road traffic which used to occur as the result of floods in seasonal torrents which cross the road near Ambala and other places; the Grand Trunk Road now runs without a break right through the province and traffic on it suffers no interruption at any time of year.

The length of unmetalled roads has risen from 20,857 to 22,106 miles in the same period.

In spite of the financial stringency there has been much activity on public works not directly connected with communications, and the decade is marked by small beginnings in the introduction of electricity. The Simla Hydro-electric scheme which provides energy to Simla and also pumps water to that station from a distance of thirteen miles was commenced in 1908 and completed in 1914; Lahore has been provided with electric light and energy for fans by the Lahore Electric Supply Company which started distribution of current in 1912; in Mianwali District the construction of the Nammal Dam has provided irrigation to 18,000 acres of cultivable land and has marked a new development in the irrigation system of the province; in Lyallpur an experiment in agricultural economics has been initiated by the construction of a grain elevator on American lines; in Lahore much progress has been made in the extension and construction of public buildings including hospitals and a veterinary college, and a step forward in the system of treatment of criminals has been marked by the conversion of the old district jail into a Borstal Institution where youthful offenders are afforded a chance of reclamation.

Section V.—The Movement of the Population, 1911-21.

37. The census showed an increase of 1,309,693 and 74,741 persons in the Punjab and Delhi respectively, being increments of 5·5 and 18·8 per cent. on their populations in 1911. Total variations in the Punjab and Delhi.

Taking the two provinces together the numbers of immigrants and emigrants have increased by 52,713 and 1,332 respectively resulting in a total gain by migration of only 51,381 persons which forms a negligible factor in the total increase. In the Punjab 2·5 per cent. of the total population, and in Delhi 38·1 per cent., consists of immigrants; hence the census statistics for the Punjab illustrate the natural increase in the countryside whilst those for Delhi do not.

Figures showing how the total increase is distributed between British and State territory, between town and country, and between the sexes are given in the margin. Immigration accounts for the increase in Delhi being so much greater than that in the Punjab; though this immigration was mainly caused by the creation of the new capital it is large in the rural as well as in the urban area. That the rate of increase has been larger in British Territory than in the Punjab States is entirely due to the fact that much of the State territory is situated in parts of the province where the increase

	Percentage of increase.		
	Persons.	Males.	Female
a.—Total area.			
Punjab ..	5.5	4.9	6.3
Punjab, British ..	5.7	5.0	6.5
Punjab States ..	4.8	4.4	5.3
Delhi ..	18.8	21.1	13.0
b.—Urban area			
Punjab ..	12.2	13.5	10.4
Punjab, British ..	12.9	14.5	10.8
Punjab States ..	8.2	8.1	8.4
Delhi ..	20.1	25.0	12.5
c.—Rural area			
Punjab ..	4.8	3.9	5.9
Punjab, British ..	4.8	3.9	6.0
Punjab States ..	4.5	4.1	5.0
Delhi ..	14.8	15.7	13.7

has been smaller than elsewhere, it is due to locality and has no traceable connection with any difference in administration.

Vital statistics show a slower rate of natural increase in towns than in rural areas, and that the actual increase in towns has been so much greater than in the country must be due to a movement of the rural population towards them. The increase in the Delhi urban area is exceptional and is fully accounted for by the creation of the capital, whilst the rapid increase in the rural area is also due to immigrants attracted by the vicinity of the city and illustrates the universal fact that the countryside can and does support a larger rural population in the vicinity of large towns than elsewhere. The greater rate of increase in urban than in rural areas in the Punjab is an entirely new feature of census statistics, for the first time the proportion of the population living in towns has increased; this new feature is shown both in British and State territory but far less in the latter, the difference is in reality greater

Number of urban to 1,000 of the rural population.

	1911.	1921.
Punjab ..	108	115
Punjab, British ..	111	120
Punjab States ..	92	95
Delhi ..	1,583	1,657

than the figures indicate as part of the increase in the urban population of the states is due to a mere terminological change under which the headquarters of many States have been for the first time treated as towns in the census statistics.

In the Punjab as a whole there are now 671,285 more females and 638,408

Number of females to 1,000 males.

	1911.	1921.
Punjab ..	817	828
Punjab, British ..	818	830
Punjab States ..	814	820
Punjab Urban Area ..	739	719
Punjab Rural Area ..	826	841
Delhi ..	793	733
Delhi Urban Area ..	752	672
Delhi Rural Area ..	860	845

more males than in 1911 and, though the difference between these numbers is small yet owing to the previous disparity between the sexes, this constitutes an increase of 6.3 per cent. amongst females as against only 4.9 per cent. amongst males. This higher rate of increase amongst females has done much to remedy the evil results of the plague in the previous decade which by 1911 had left only 817 females to every 1,000 males, and the proportion has now risen to 828. In all urban areas, except those in the Punjab States, males have increased faster than females showing that the drain of the towns on the rural population has been largely confined to male workers. Amongst rural areas that of Delhi is the only one showing a rise in the proportion of males; this is quite possibly due to the fact that the stream of migration to this partially suburban area has affected the sex distribution in the same way as it has done in true urban areas.

The change in age distribution has been almost as striking as that in the

Increase per cent. in different age groups.

All ages ..	..	5.8
Under 10 ..	..	10.8
10-14 inclusive ..	..	10.1
15-39 ..	..	-0.1
40-59 ..	..	4.2
Over 60 ..	..	18.3

proportion of the sexes; whilst the increase in the total population of the Punjab and Delhi has been 5.8 per cent. there has been a decline in the number of persons between 15 and 40 years of age associated with a very large increase in the numbers of old people and young children.

The influenza epidemic of 1918 is responsible for this change in age distribution as can be seen from the marginal table in which the death-rate of 1918 is shown as a multiple of the mean death-rate for the decade ; in that abnormal year the death-rate amongst young children was increased by less than 50 per cent. whilst it was quadrupled amongst young adults and only doubled amongst the aged.

Death-rate of 1918 divided by the mean death-rate of the decade.

Age.	Male.	Female.
0-1	1.14	1.14
1-4	1.56	1.52
5-9	2.53	2.61
10-14	3.00	3.17
15-19	3.67	3.80
20-29	3.69	3.75
30-39	3.42	3.37
40-49	2.88	3.12
50-59	2.69	2.89
Over 60	1.85	2.00
All ages	2.18	2.26

The plague epidemics of 1901-11 lessened the reproductive power of the population by lowering the proportion of women, this defect has been remedied during the last decade but it has been replaced by a decline in the numbers of persons of the procreative ages. The defect observed in 1911 was one that might have been permanent, that observable in 1921 is one which carries its own remedy and will be removed by the mere passage of time ; on the other hand the immediate position is worse than in 1911 for whereas in that year every 10,000 of the population included 152 women of child-bearing age (15 to 40) it now includes only 143.

38. Subsidiary Table III shows the increase per cent. in the population of each district and state recorded at each census since 1881; it should be noticed that increase per cent. in population and increase per cent. in density are identical when used with reference to a fixed area ; omission to note this elementary fact has led to some curious remarks in past census reports.

Variations
in Districts
and Pressure
on Resources

It will be my object to discover what permanent features and conditions influence the increase of population and then to discuss the temporary or fortuitous conditions which have interfered with the influence of the former during the last decade. In paragraphs 17 and 18 the pressure of existing population on existing resources was discussed at length and the districts were collected in five groups according to the extent of that pressure. The discussion was based on the static conditions of the moment, but the conclusions can now be compared with the actual movements of population in the past with a view to determining whether they account for those movements and, if not, whether they require modification.

The following lists of districts show them arranged within these groups according to the extent to which their population has varied during the last forty years and during the last decade : —

PERCENTAGE OF INCREASE IN TOTAL POPULATION.			
1881 to 1921.		1911 to 1921.	
<i>Group 5</i>	.. 97.7	<i>Group 5</i>	.. 15.9
Lyalpur	.. 2,313.7	Montgomery	.. 42.3
Montgomery	.. 97.0	Sheikhupura	.. 19.8
Shahpur	.. 87.6	Lyalpur	.. 15.6
Sheikhupura	.. 81.6	Lahore	.. 13.0
Multan	.. 60.1	Shahpur	.. 11.6
Lahore	.. 47.1	Multan	.. 9.3
Jhang	.. 46.0	Jhang	.. 8.7
<i>Group 4</i>	.. 30.2	<i>Group 4</i>	.. 6.3
Ferozepore	.. 46.9	Ferozepore	.. 14.4
Hissar	.. 21.5	Hissar	.. 1.5
Attock	.. 15.3	Attock	.. -1.3
<i>Group 3</i>	.. 18.2	<i>Group 3</i>	.. -2.1
Mianwali	.. 36.6	Mianwali	.. 4.9
Muzaffargarh	.. 28.8	Muzaffargarh	.. -0.2
Dera Ghazi Khan	.. 28.4	Dera Ghazi Khan	.. -6.6
Jhelum	.. -3.5	Jhelum	.. -6.7
<i>Group 2</i>	.. 2.8	<i>Group 2</i>	.. 4.0
Rawalpindi	.. 20.8	Ludhiana	.. 9.7
Gujranwala	.. 7.6	Rohtak	.. 8.0
Rohtak	.. 4.3	Amritsar	.. 5.5
Jullundur	.. 4.2	Rawalpindi	.. 3.9
Amritsar	.. 4.0	Karnal	.. 3.4
Gurdaspur	.. 3.5	Gujranwala	.. 2.9
Sialkot	.. -0.3	Jullundur	.. 2.5
Karnal	.. -3.2	Gurdaspur	.. 1.8
Ludhiana	.. -8.3	Sialkot	.. 0.7
<i>Group 1</i>	.. 1.5	<i>Group 1</i>	.. -0.2
Simla	.. 28.6	Simla	.. 17.9
Gujrat	.. 13.3	Gujrat	.. 4.6
Kangra	.. 4.8	Hoshiarpur	.. 1.0
Hoshiarpur	.. 2.9	Kangra	.. -0.6
Gurgaon	.. -10.5	Ambala	.. -1.4
Ambala	.. -18.0	Gurgaon	.. -6.6

An examination of the figures shows at once that the increase in population during the last forty years has been greatly influenced by the pressure on resources. In the first list the only districts which appear to be wrongly grouped are Ferozepore, Hissar, Attock, Jhelum, Rawalpindi, Simla, Gujrat, Kangra and Hoshiarpur; and five out of these nine districts can at once be eliminated for special reasons:—

The misplacement of Ferozepore is too slight to be of any significance; the increase in population of Rawalpindi and Simla is largely due to the presence of growing towns, apart from the urban population the increase in these districts has been 11·8 and—18·8 per cent. respectively; we have already seen that the people of Hoshiarpur and Kangra depend very largely on earnings of service outside their districts, and these earnings enable the population to increase in excess of the numbers which could be supported by the resources of the districts.

The list shows that in twenty-five out of twenty-nine districts the increase in population during the last forty years has been governed by the extent of pressure on resources. Everyone would expect that pressure on resources would affect the increase of population, but the figures go further and tend to show that this one factor has actually governed the increase to the exclusion of all others.

Cause and effect are so strikingly connected that we are at once led to question the grouping of the four districts which appear to form exceptions to the general rule, Hissar, Attock, Jhelum and Gujrat. Are we to recognise these as exceptions to a general rule proved by all other districts, or are we to argue in a circle and assume that they were wrongly grouped in paragraph 18? Hissar, Attock and Jhelum are all marked by two characteristics;—their dependence on rain and the inferior quality of much of their soil; the arguments in paragraph 18 were based on statistics extending over a term of years, and it was noted that in districts where crops suffered violent fluctuations they could not support such large numbers of people as in districts where they gave the same average outturn but were less liable to fluctuate from year to year; I am doubtful as to whether sufficient weight was given to this point and therefore whether these districts should not have each been placed in the group below that in which they are shown above. As regards Gujrat I can find no reason for modifying the conclusions drawn in paragraph 18.

The increase during the last decade does not show the same striking agreement with the arrangement of districts by groups though it shows some traces of the influence of the retarding force of pressure on resources; the same is true of the increase in other decades and it is evident that a period of ten years is insufficient for this one factor to prevail over the other innumerable influences which affect increase.

The second list indicates that during the last decade the increase has been much less than might have been expected in Hissar, Attock, Muzaffargarh, Dera Ghazi Khan, Jhelum, Sialkot and Gurgaon; whilst in a less degree Shahpur, Multan, Jhang, Mianwali and Gurdaspur exhibit the same feature of an unexpectedly slow rate of increase; and, on the other hand, Ferozepore, Ludhiana, Rohtak and Gujrat show an increase in population larger than that which might be expected from their natural advantages and their previous history.

39. The first influence to which we turn is naturally that exerted by disease;

the health of the decade has been uniformly good except for the epidemics of plague, fever and influenza in 1915, 1917 and 1918 respectively. Apart from these the death-rates of the various districts have been mainly governed by local conditions, but these epidemics spread over the province irrespective of conditions and the additional death-rate caused by them may be described as fortuitous; their influence was a chance feature of the decade quite independent of the permanent forces which affect growth

Effect of
Disease on
Variations in
Districts.

EXCESS IN DEATH-RATES DUE TO EXCEPTIONAL CAUSES.				
District.	Plague 1915.	Fever 1917.	Influenza 1918.	Total.
Gurgaon	0·0	1·7	12·3	14·0
Rohtak	0·0	0·3	9·6	9·9
Montgomery	0·0	2·6	6·5	9·1
Ludhiana	0·8	0·2	7·7	8·7
Gujrat	3·4	1·0	4·0	8·4
Gujranwala	1·1	2·1	4·6	7·8
Dera Ghazi Khan	0·0	2·3	5·4	7·7
Hissar	0·0	0·7	6·7	7·4
Lahore	0·6	0·9	5·6	7·1
Sialkot	1·7	1·3	2·9	6·9
Shahpur	1·1	1·9	3·7	6·7
Jhelum	2·6	0·6	3·5	6·7
Gurdaspur	1·3	0·6	4·6	6·5
Multan	0·0	1·3	5·4	6·4
Jhang	0·2	1·7	4·5	6·4

of population. The figures in the margin show the extra death-rate caused by these diseases in the fifteen districts where their aggregate effect was greatest; the figures show the excess of the plague and fever death-rates in 1915 and 1917 over the normal death-rates from those diseases, and the total death-rate from influenza in 1918 all of which was abnormal.

Of these fifteen districts which suffered most heavily, nine are amongst those mentioned in the previous paragraph as showing a smaller increase than expected, but on the other hand three of them are amongst those in which the increase was characterised as unexpectedly high. The exceptional epidemics of the decade do not go far in accounting for the abnormalities in increase of population noted in the last paragraph.

40. Migration will be discussed in detail in Chapter III but a few of the conclusions which will be found in that chapter must be mentioned here in order to explain some of the features of the recent changes in distribution of the population. Migration must not be regarded as a cause of the changes in district population but rather as the means through which such causes operate. It has already been shown that the changes in distribution over a long period have been almost entirely attributable to pressure on resources, and, as migration has always been taking place, it follows that it too is also governed in the long run by this pressure; it is therefore unnecessary to examine the normal trend of migration in this paragraph and attention will be confined to the abnormal or temporary migration that has occurred during the last decade, such migration whilst not in itself accounting for the abnormal changes in population noticed in paragraph 38 may throw considerable light on the causes which have produced them.

Effect of
Migration on
Variation in
Districts.

The main types of migration which will be noticed as peculiar to the last decade are that due to the establishment of the canal colonies and that due to the scarcity conditions which prevailed at the time of the census.

The statistics show that a canal colony passes through five stages in its evolution;—before being irrigated it supports a small population living in widely scattered villages or else of a nomadic nature; immediately after irrigation it receives a great influx of colonists who include the government grantees and large numbers of persons seeking employment as their tenants and artisans; the grantees are selected mainly from the most congested districts but also include persons from elsewhere who have particular claims, the tenants usually accompany the grantees and their composition shows the same characteristics; after the grantees have established themselves and the pioneer work is completed many of the tenants and labourers find that the keen demand for their services shows signs of abatement and large numbers return to their original homes or, if opportunity occurs, move on to another freshly colonised tract; those who leave the colony consist mainly of those who came originally not because of severe pressure in their own districts but because of attachment to grantees coming from districts which are not overcrowded; after this exodus of superfluous tenants and of the unsuccessful colonists the population settles down to permanent residence, immigrants continue to arrive in small numbers but the old immigrants die out and are replaced by their children so that even without any emigration the number of immigrants rapidly grows less; the final stage is reached when the original stock of immigrants have all died out and the colony is inhabited by persons born within its boundaries and in this stage it ceases to bear the distinctive marks of a colony and begins to rank with the old districts in its effect on migration. Each stage except the last is temporary and the migration which accompanies it is peculiar to the time and is not a permanent feature of provincial movements of population.

The exact operation of these processes is somewhat obscured by the fact that the different colonies are not coterminous with districts, for which alone census statistics are available. Montgomery and Sheikhpura contain much land colonised during the last decade but both also include some land which was irrigated and colonised before the decade had commenced; separate statistics for Sheikhpura before the last census are not available and it has to be considered in conjunction with Gujranwala. These districts show the first stage in the process of colonisation; in Montgomery the excess of immigrants from the non-colony districts over the emigrants to them has risen from 10,433 to 84,491 in the decade and allowing for deaths since 1911 probably 76,141 of the present

immigrants have arrived during the decade; in Gujranwala and Sheikhupura the excess has risen from 74,272 to 136,172 during the decade and probably 76,287 of the present immigrants are of recent arrival. Part of Multan has also been first colonised since 1911, but so much of it was previously irrigated that the figures are much less striking; in it the "balance of migration" from non-colony districts has risen from 26,498 to 42,032 during the decade and the actual immigration during the decade has resulted in the presence in 1921 of 20,834 new colonists.

The next stage in colonisation is illustrated by Shahpur; part of this had already been colonised in the previous decade and the last ten years have witnessed the process of consolidation and the exodus of superfluous tenants and labourers. The full effect is obscured because a large part of the district is not colony land and the migration to and from that part follows different laws, even so the statistics give striking proof of the theory; the balance of migration in favour of this district from the non-colony districts has dropped from 83,762 in 1911 to 38,965 in 1921, this decline of 44,797 is partly accounted for by deaths amongst the old colonists but allowing for this it is still probable that actual emigration during the decade has resulted in the enumeration of 28,043 persons elsewhere in 1921 who were inside the district in 1911.

The colonisation of Lyallpur took place before the census of 1901 which naturally revealed an enormous increase in population entirely due to immigration; the census of 1911 showed a decrease in the number of immigrants far larger than could be caused by deaths and must have been partly attributable to actual emigration; the present census shows a drop in the balance of migration from 392,374 to 322,472 which is a decrease of no less than 69,902, yet this decrease is more than accounted for by the normal mortality amongst old colonists and it is probable that actual immigration exceeded emigration during the decade by about 9,000 persons of whom 8,573 now survive.

These statistics illustrate the three intermediate stages in colonisation, but it must be noticed that the figures for the Jhang district do not fit in with the rules enunciated, this district is however exceptional in many ways and the migration between it and non-colony districts has been too small to form the basis of any conclusive arguments.

These remarks apply to the migration between the six true colony districts and the non-colony districts; the figures for migration between the six districts themselves are even more striking; during the decade Shahpur has lost large numbers to Gujranwala, Montgomery and Jhang, and a few to Multan, whilst practically no movement has taken place between it and Lyallpur; Lyallpur has lost to every district except Jhang; Montgomery, Sheikhupura and Multan have all gained heavily from the older colonies whilst amongst themselves the only considerable movements have been from Montgomery to Sheikhupura and from Multan to Montgomery.

The actual figures for the gain in the population of 1921 due to the migration of the decade are as follows:—

	Canal Colonies.	Other British Districts.	Punjab States.	Outside Province.	Total.
Lyallpur	—22,451	8,573	—5,559	1,731	17,706
Shahpur	—13,215	—28,043	244	—1,278	41,292
Gujranwala and Sheikhupura	36,903	76,287	1,363	4,723	119,276
Multan	6,861	20,834	—3,683	—1,024	22,988
Montgomery	3,289	76,141	4,718	4,302	88,450
Jhang	—11,387	1,663	—178	437	9,465
Total	0	155,455	—3,095	8,891	161,251

It will be seen that Shahpur has lost both to colony and to non-colony areas, Jhang and Lyallpur have lost to colony areas but have gained from non-colony areas, and the three new colonies have gained both from colony and non-colony areas. The gain of each colony from non-colony areas indicates its present force of attraction, but the loss of one colony to another is the result of two attractions in opposition; roughly we can say that the migration away from Lyallpur, Jhang and Shahpur represented by the first column of figures is an

exceptional feature of the decade due to the formation of new colonies, whilst all other figures are normal for these three districts; on the other hand all the figures for Montgomery, Sheikhupura, and Multan are abnormal features of the decade.

We can now turn to the effect of the canal colonies on the non-colony districts; in 1911 there was a balance of migration of 590,003 in favour of the former and by 1921 this had risen to 627,924, this constitutes an increase of 37,451 but allowing for deaths amongst the old colonists it is probable that no less than 155,455 of the new balance in favour of the colonies is due to migration of the decade.

Birth-place.	1911.	1921.	New Colonists.
Sialkot	288	223	211
Amritsar	159	148	115
Jullundur	127	155	240
Gurdaspur	97	97	96
Gujrat	97	49	-96
Hoshiarpur	82	99	150
Ludhiana	51	40	8
Lahore	36	46	75
Jhelum	32	35	40
Ambala	30	30	29
Ferozepore	16	23	43
Mianwali	11	17	36
Muzaffargarh	9	10	18
Hissar	6	8	13
Kangra	3	1	-6
Rohtak	3	2	0
Gurgaon	3	4	7
Rawalpindi	3	5	10
Karnal	3	1	-4
D. G. Khan	2	1	-4
Attock	2	6	19
Simla	0	0	0

Rawalpindi and Attock have increased their contributions to the colonies.

The majority of these changes can be ascribed to one reason which is the temporary migration which occurred at the end of the decade in consequence of the widespread failure of crops.

Taking the average matured area for the period 1910-11 to 1919-20 as a normal for the basis of comparison, the percentage of the normal area which was harvested in 1920-21 is shown in the marginal list; those districts which appear near the bottom of the list naturally supplied large numbers of temporary emigrants looking for employment, and out of the eleven districts which have supplied a greater number of colonists than usual seven appear at the very bottom of the list, the other four being Jullundur, Hoshiarpur, Lahore and Muzaffargarh. Residents of Jullundur, Hoshiarpur and Lahore have secured very large grants in the Montgomery district and this may account for the increase in emigration to the colonies though it is also possible that it has been temporarily increased owing to scarcity. The enhanced emigration from Muzaffargarh has been almost entirely towards the adjacent district of Multan, and, though the area cropped in each district bore much the same relation to the normal, yet it is quite certain that owing to failure of the inundation canals there was a certain amount of

temporary emigration from the former to the latter.

Reference to a map will show that Ludhiana and Amritsar are situated amongst districts where the failure was greater than in themselves, this being so it is natural that the inhabitants should regard their position as favourable and would resort less than usual to emigration; the falling off in emigration from Gujrat is clearly due to the fact of the introduction of new irrigation which caused

many persons who had previously sought more or less permanent labour in the colonies to return to their ancestral lands.

Summing up it is clear that Lyallpur, Jhang and Shahpur have lost many inhabitants and that Sheikhupura, Montgomery and Multan have gained many owing to the conditions peculiar to a decade which witnessed the colonisation of the latter three districts; and also that scarcity conditions in 1921 led to much temporary migration from Jhelum, Hissar, Attock, Rawalpindi, Mianwali, Ferozepore, Gurgaon and Muzaffargarh to the colonies; whilst variations in the acuteness of the scarcity led to less migration than usual from Amritsar and Ludhiana.

Scarcity conditions have affected the migration between non-colony districts themselves as well as between them and the colonies; and in the case of districts near the boundaries of the Punjab States and of other provinces it has also affected migration across the border, but in these last cases it is impossible to trace its influence as we have not got the agricultural statistics for the states and extra-provincial districts. Comparison of the balance of migration (*i. e.*, the number of immigrants minus the number of emigrants) in favour of each district in 1911 and 1921 gives an indication of the changes in the course of migration, and the effect of these changes on the population is best illustrated by giving this balance *per mille* of the 1911 population. For instance; in 1911 Hissar showed 136,396 immigrants and 116,814 emigrants and thus had a balance of migration of 19,582 in its favour but in 1921 the balance was 39,211 against it, so that the difference in the balance in the two years was—58,793 which amounts to —73 *per mille* of its population in 1911. Changes in the course of migration have therefore accounted for a change of —73 *per mille* in the population of the district since 1911.

The effect of changes in migration, calculated in this way, are shown in the following table which gives separate figures for migration with British districts of the Punjab, with Punjab States and with areas outside the province:—

Change in the balance of migration between 1911 and 1921 *per mille* of the total population of 1911.

	With Punjab British Territory.	With Punjab States.	Beyond the Punjab.	Total.
Montgomery	169	9	27	205
Gujranwala and Sheikhupura	114	1	5	120
Simla	114	39	—43	110
Gujrat	49	0	—3	46
Multan	24	—4	—4	16
Ludhiana	21	15	3	39
Amritsar	16	0	—5	11
Rawalpindi	13	0	15	28
Rohitak	10	4	31	45
Jhang	5	—1	0	4
Karnal	4	—6	—4	—6
Gurdaspur	4	—2	1	3
Ferozepore	1	—9	13	5
Dera Ghazi Khan	—2	—7	—3	—12
Ambala	—3	—4	—14	—21
Lahore	—4	0	—13	—17
Gurgaon	—6	2	19	15
Muzaffargarh	—6	—3	—1	—9
Kangra	—7	—11	1	—17
Attock	—8	—1	1	—8
Mianwali	—8	0	15	7
Sialkot	—12	1	—3	—14
Hoshiarpur	—17	1	—3	—19
Hissar	—27	—23	—23	—73
Jullundur	—30	—1	—6	—37
Jhelum	—32	1	—13	—44
Shahpur	—91	0	—1	—92
Lyallpur	—136	—11	—1	—148

The districts are arranged according to the figures in the first column, for it is only for British Territory that we have crop statistics which enable us to gauge the influence of the scarcity conditions. The position of the canal colonies in this statement has already been explained. Apart from these, and Simla, the migration from which is entirely artificial, and Gujrat which has been newly irrigated, it will be found that every district high on the list reaped

a higher percentage of a normal crop in 1921 than adjacent districts whilst the reverse is true of those districts low on the list. The only exception is found in Jullundur, which sent many grantees to Montgomery, and a few of the districts near the middle of the list in which the change in balance of migration with other districts has been very small. The table affords very striking proof of the fact that the main changes in the stream of migration in the two census years are due very largely to temporary migration resulting from the scarcity conditions which prevailed at the 1921 census.

Had we got figures showing the severity of the scarcity in the Punjab States and in districts of the surrounding provinces it is probable that reference to these and to a map would show that the figures in the second and third columns are as much due to variations in that scarcity as are those in the first column.

41. Turning to the second column of figures at the beginning of paragraph 38, which shows the percentage of increase in each district during the last decade, we can now see the effect of the conclusions arrived at in the last two paragraphs. In the group of districts at the head of that list we have seen that Montgomery, Sheikhpura and Multan owe a great deal of their increase to migration which is a feature peculiar to the decade which witnessed the first colonisation of large areas within them; on the other hand this same feature of the decade has had an opposite effect on Lyallpur and Shahpur in which there would have otherwise been larger increases. Shahpur has been passing through the adjustment stage of colony growth and has lost many superfluous labourers and unsuccessful colonists, its rate of increase has therefore been less during the decade than before and in all probability less than it will be in the near future. Lahore's rate of increase has been checked by extensive migration to Montgomery, but on the other hand it will be shown in Chapter II that it has been accelerated by an influx of immigrants from other districts to Lahore City. Multan being yet in the early stages of colonisation is likely to show a far greater rate of increase in the near future. Jhang has been affected, like Lyallpur, by the drain on its population caused by the newer colonies. In short, peculiar features of the decade account for the great differences in the rate of increase in these seven districts and but for these they would have shown much less wide variations.

Summary
of Causes
Affecting
Variations in
Districts.

In the next group each of the three districts suffered from extremely bad harvests in 1921 and there was much temporary emigration from them all, but in the case of Ferozepore this was nullified by temporary immigration from adjacent parts of Rajputana which suffered even more severely; Hissar in particular suffered so severely that instead of exercising its normal attraction on the residents of Rajputana and the United Provinces it actually sent emigrants to them in large numbers.

In the next group Mianwali whilst losing by exceptional emigration to the canal colonies gained by temporary immigration from the country to the west which suffered more severely from scarcity than it did itself; Muzaffargarh and Jhelum lost large numbers by temporary emigration in 1921 and had it not been for this would almost certainly have shown considerable increases instead of losses in population. Dera Ghazi Khan, though this is not borne out by recorded statistics, had also a bad year and lost by temporary emigration; but the main reason for its small rate of increase is to be found in the attraction exercised on its population by extensive newly irrigated lands in Bahawalpur State.

The nine districts in the next group do not appear to have been affected very considerably by peculiar features of the decade, but the five which show the greatest increase certainly owe part of that increase to temporary immigration from neighbouring districts during the scarcity of 1921; increase in Jullundur was checked by the grant of lands in Montgomery to members of its congested population; Sialkot whilst sending large numbers of emigrants to the canal colonies did not exceed its previous records in that direction, but it lost considerably more emigrants than usual to non-colony districts.

In the last group Simla gained at an artificially high rate merely owing to the presence of the town of Simla, the March population of which exceeded that of 1911 by a very large amount owing to the innovation in various Government departments of remaining at the summer headquarters throughout the year. Gujrat gained exceptionally owing to new irrigation which brought back

numerous emigrants who had sought employment in the canal colonies at a time when their own lands were dry and comparatively unproductive. Ambala lost by increased emigration, whilst Gurgaon lost more than any other district by epidemics of disease.

It is thus seen that the temporary features attending the close of the decade,

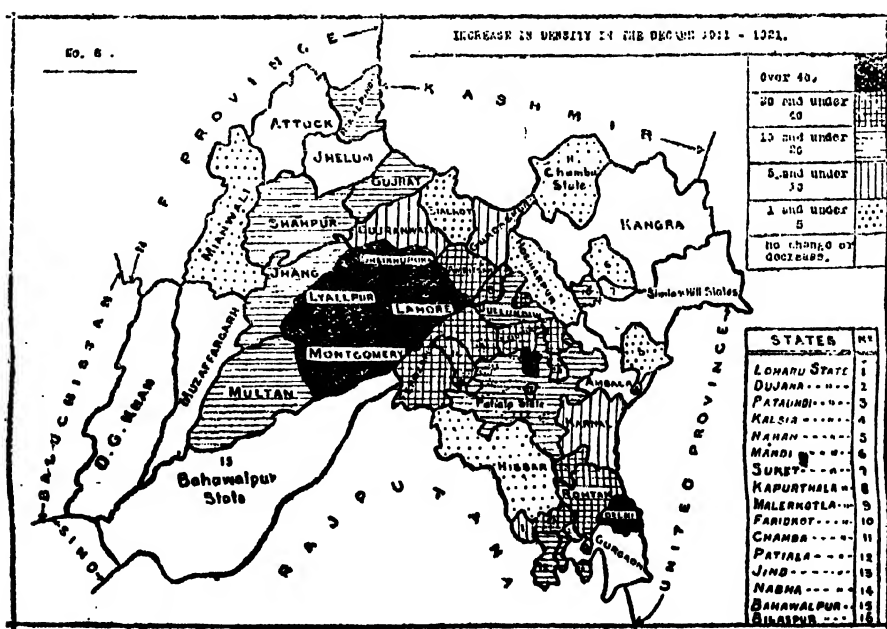
Kangra	3,006
Hoshiarpur	2,856
Gujrat	2,619
Gurdaspur	1,892
Jullundur	1,685
Jhelum	1,557
Sialkot	1,315
Lyallpur	1,239
Multan	800
Attock	681
Rawalpindi	637
Gujranwala and Sheikhupura	507
Gurgaon	400
Muzaffargarh	434
Ambala	413
Mianwali	181
Hissar	177
Rohatak	30
Shahpur	6
Karnal	-114
Ludhiana	-209
D. G. Khan	-359
Simla	-368
Montgomery	-410
Jhang	-551
Lahore	-801
Ferozepore	-2,559
Amritsar	-9,617

and the colonisation which occurred during the decade, all tend to account for the cases where increase in population during the last decade does not appear to have been in accordance with that which would have been caused by pressure on resources acting alone. Unfortunately it is quite impossible to make any numerical estimate of that part of the migration of the decade which was temporary or due to changes in colonisation; were it possible to do so we could eliminate it and then get further figures indicating where to look for further peculiar influences of the decade; without it it is scarcely logical to look further as it in itself may be sufficient to account for all the peculiarities noticed in paragraph 38. It may perhaps be useful however to indicate how the increased attraction of the large towns has affected the population of the various districts. We have figures for immigrants to towns but not for emigrants from them; the marginal statement shows the excess of the

immigrants recorded in 1921 over those recorded in 1911 to the cities and towns of Lahore, Amritsar, Multan, Rawalpindi, Ambala, Jullundur, Sialkot and Ferozepore; immigrants from the districts in which each town is situated have not been included as they have no effect on the population of such districts. It is interesting to observe the rival influences of pressure on population and proximity to the towns which have operated to produce this change in the urban population, but detailed comments must be reserved for Chapter II.

Variations
in Density.

42. The increase in density per square mile is indicated in the following map, the striking feature about which is that it shows that the changes in density during the last decade have been characterised by a great increase in the central parts of the province accompanied with little change or with actual decrease in the outlying districts :-



The actual change in the number of persons per square mile is a somewhat misleading guide to variations in population; for instance Montgomery, Sheikhupura, Lyallpur and Lahore have all gained over forty persons per square mile

during the decade but their populations have shown very different features in their increase; Montgomery had an extremely light population in 1911 and its gain of 46 persons to the mile has been caused by a very rapid increase and yet has still left the countryside sparsely inhabited; Lahore with a much denser population to start with has needed a comparatively small increase in it in order to give it 48 more persons to the mile; whilst Sheikhupura and Lyallpur show intermediate rates of increase. If however the change in density is shown as an increase per cent. on its initial amount it becomes synonymous with change in population. In the following marginal table the first and second columns of figures show the change in density expressed in these two ways and it will be noticed that the second column is identical with the statement given at the beginning of paragraph 38. The third and fourth columns show the change in density of the rural population per square mile of cultivated area; it is to a comparison of columns two and four that attention should be paid as the latter shows how far the

Changes in Density between 1911 and 1921.

District.	Mean density per square mile.		Density of rural population per cultivated square mile.	
	Actual.	Per cent.	Actual.	Per cent.
Montgomery ..	46	42.3	-71	-14
Sheikhupura ..	41	19.8	0	0
Lyallpur ..	40	15.6	21	5
Lahore ..	48	13.6	107	29
Shahpur ..	17	11.6	-20	-5
Multan ..	13	9.3	-56	-11
Jhang ..	13	8.7	-9	-2
Ferozepore ..	32	14.4	45	18
Hissar ..	3	1.5	7	4
Attock ..	-2	-1.3	9	3
Mianwali ..	3	4.9	-20	-5
Muzaffargarh ..	0	-0.2	13	2
D. G. Khan ..	-4	-0.6	86	21
Jhelum ..	-12	-0.7	-4	-1
Ludhiana ..	35	9.7	66	17
Rohtak ..	20	8.0	58	17
Amritsar ..	30	5.5	51	8
Rawalpindi ..	10	3.9	44	8
Karnal ..	9	3.4	39	9
Gujranwala ..	8	2.9	0	0
Jullundur ..	15	2.5	40	6
Gurdaspur ..	8	1.8	27	4
Sialkot ..	4	0.7	19	3
Simla ..	68	17.9	-41	-4
Gujrat ..	14	4.6	-30	-5
Hoshiarpur ..	4	1.0	38	5
Kangra ..	0	-0.6	57	6
Ambala ..	-5	-1.4	16	3
Gurgaon ..	-22	-6.6	10	3

increase per cent. in mean density (or in population) is nullified by a corresponding or even greater increase in cultivation; for instance in Montgomery, Shahpur, Jhang, Mianwali and Gujrat whilst population and mean density have increased the incidence of the rural population on the cultivated area has actually decreased owing to an extension of cultivation which more than balances the increase. In Simla the apparent increase in mean density is entirely due to urban growth and beyond the limits of the one town the density of the population has decreased very considerably. The reverse conditions are observable in Attock, Dera Ghazi Khan, Ambala and Gurgaon in which the bad seasons of 1921 caused a restriction of cultivation so great that a decline in population was accompanied by an increase in its incidence on the cultivated area; in these districts it is clear that even though there was temporary emigration in 1921 it was insufficient to leave the remaining population with means

of subsistence equal to that which they enjoyed in 1911.

These cases are the most striking for in them an increase in mean density has been accompanied by a decrease in the incidence of the rural population on the cultivated area which provides its means of subsistence, or *vice versa*; but in a less degree every difference between the figures in the second and fourth columns shows the same facts; in Lyallpur increase in population did not keep pace with increase in cultivation, in Jhelum a decrease in cultivation was accompanied by a very far greater decrease in population, and in all the districts not yet mentioned the increase in population was not so great as the increased pressure on resources owing to those resources being less in 1921 than in 1911.

43. No profit can be derived from an attempt to forecast the future movements of anything so susceptible to innumerable and fortuitous influences as the population of districts, yet the whole course of observation and argument given in this section tends to show that, apart from temporary disturbing causes, there is a normal difference in the rates of increase in the different districts of the Punjab. In paragraph 18 the various districts were classified according to their apparent present capacity of supporting an increased population, in paragraph 38 it was shown that the past increase over a long period has been roughly in

Future
Variations

accordance with that present capacity, in paragraphs 39 to 42 the reason for the increases in population during the past decade not being in accordance with that capacity has been found in various facts such as epidemic disease, canal colonisation and scarcity at the time of the last census which were all peculiar features of the decade. It therefore appears reasonable to conclude that the variations in the next decade will also reflect the varying capacity to support increased population mentioned in paragraph 18, except in so far as peculiarities in conditions may operate to prevent that result. It is impossible to foretell the chances and changes of the next ten years, but a few coming events have already cast their shadows before them and may be mentioned as influences likely to affect the future spread of population. In the canal colonies, Lyallpur is likely to experience little change in her rate of increase though it must inevitably diminish as pressure becomes felt; Shahpur having passed through the stage of consolidation and ejection of superfluous labour is likely to show a somewhat augmented rate of increase; Sheikhpura, now fully colonised, is likely to follow the example afforded by Shahpur in this last decade and to lose many of its immigrants and therefore to show a lessened rate of increase; in Montgomery and Multan the present rapid increase is likely to continue for some years of the coming decade before being replaced by the slower rate which accompanies the stage of colonisation to which I have referred as consolidation.

Schemes for fresh irrigation from the Sutlej, if they are completed within the decade, should lead to great increases in Ferozepore and Bahawalpur; and similarly if the Bakra Dam, which has so long been mooted, comes into operation it will enable the south-eastern districts to support a larger population which will probably be brought into being by increased immigration from outside the province.

Increased industrialism is likely to lead to an increase of urban population, of which there are already a few tentative signs, and may lead to a movement of population towards Lahore, Amritsar and other large centres.

And finally the return of the temporary emigrants of 1921 should give an apparently accelerated rate of increase in all the districts which suffered most severely from the scarcity prevalent at the time that this census was taken.

Section VI.—Houses and Families.

Description
of Punjab
Houses.

44. The types of buildings in which the various races of the Punjab reside are so numerous and varied that it is extremely difficult to give a definition of the word "house" which will apply to even approximately the same unit in different parts of the country. Undefined, the word may be applied equally well to a collection of buildings inhabited by large numbers of persons connected by very indefinite social ties and only characterised as a separate unit by the existence of either a common courtyard or common approach, or to every individual room of one compact building. The main difficulty arises from the custom which obtains in many parts of the province of the various members of a family separating from each other in some particulars and not in others; such separation may be complete in every way and involve separate establishments housed in completely separate buildings and owning separate property, it may however involve the mere separation of feeding and cooking arrangements whilst the different members continue to use parts of the same ancestral building and to own their property jointly; the word "house" at once begins to be confused with the word "family" and both are extremely indefinite terms.

In the compact villages of the south-east it is usual to find a large number of branches of the same family occupying one ancestral group of buildings situated round a common courtyard, but that group may consist of perfectly distinct buildings and the lives of the branches residing in each may be entirely separate and independent; the group of buildings however represents what was once the house and common residence of a single simple family, and it is often impossible to draw the dividing line between a group of houses and a house formed of a group of buildings. In towns the difficulty is even greater, whole lines of buildings may open on to one common courtyard or on to a semi-public lane or alley possessing only one approach from the public streets; here any definition based on the possession of a common courtyard or entrance is manifestly absurd as both the buildings and the people inhabiting them may be entirely independent;

on the other hand a single compact building may be composed of flats and rooms having separate entrances from the public highway and inhabited by persons who have no relations with one another.

Definitions based entirely on structural features or entirely on the connection between the inhabitants are equally faulty, and, in connection with the census, it has always been recognised that it is impossible to lay down a definition which will be of any use in statistics; all attempt to define the house as a statistical unit has therefore been abandoned and the definition adopted has been devised with the sole purpose of ensuring that the enumerating staff should overlook no building likely to have inhabitants and should not include in one "house" a group of buildings so large as to make the complete enumeration of its inhabitants a matter of difficulty. The definition adopted will be discussed in the next paragraph, but before coming to it it is best to give a rough idea of the types of buildings which are met with in various parts of the province.

As a general rule the type of house follows the type of village; in the eastern plains, where compact villages sprang up on account of the necessity for mutual protection, the same consideration led to the various branches of a family hanging together and living round a common courtyard with a single entrance; the necessity of mutual protection has disappeared but the type of village has been fixed and lack of space obliges successive branches of the family to go on extending and enlarging the old buildings even though they may separate from each other by the establishment of individual cooking arrangements.

In the west, where the villages are smaller and more scattered, family dissensions lead not only to the separation of cooking arrangements but to the erection of entirely separate buildings and a discontinuance of all mutual relations except perhaps in connection with the ownership and cultivation of land; here houses are smaller and more easily distinguishable, most have their own courtyard but the buildings are for joint use as much as courtyard.

In the hills, where people live in scattered hamlets, each little family builds its own house near its fields and large groups of buildings inhabited by any but the closest relations are uncommon.

The actual structure of the houses has been fully described in previous census reports but has little bearing on the subjects to be dealt with in this report; suffice it to say that the material used depends on the locality; mud is the most common material and may be used in the form of unbaked bricks, unshaped clods, or roughly-moulded slabs; wood and stone are largely used in the foothills; thatch and matting in the riverside areas of the plains. An interesting series of names for the previous types of house common in the Montgomery District (before colonisation) is mentioned in Mr. Rose's report of 1901 as illustrating the varying extent to which those who used them were of nomadic habits, these are *-kotha* built of mud walls and roof, *khudi* of mud walls and thatched roof, *jhuqi* of walls of matting with thatched roof, *chhann* with both walls and roof of thatch, and *pakhi* which is a mere temporary shed of screens.

During the last decade there has not been a vast change in the type of houses built, but it is noticeable that burnt bricks are being increasingly employed and that buildings are becoming more and more commodious throughout the canal colonies; in towns the burnt brick is becoming an almost universal building material and, though in walled towns lack of space has led to extensions in an upward direction and to the construction of more and more additional stories, there is a very marked tendency amongst the educated and more wealthy classes to resort to buildings of the European bungalow type outside the limits of the more congested areas.

45. In 1881 the distinguishing feature insisted upon in the definition of a "house" was the possession of a common courtyard, a fact which led to the selection of inconveniently large units for enumeration in the south-eastern parts of the province; in 1891 no rigid definition was attempted but the main points insisted on in a long series of instructions were:—the situation within a common enclosure, the existence of a common courtyard with express exception of lanes and semi-public spaces in towns, and the exception of outlying huts and shelters; in 1901 the definition was made even more wide and practically came to being "every place likely to be occupied" and the actual selection of individual units was left largely to the discretion of the local census officers.

Definition
of "House"
for Census
Purposes.

In 1911 a far more rigid definition was attempted and this has been followed at the present census and is contained in the instructions issued to the enumerating staff as follows :—

In rural tracts.—“ House ” means a structure occupied by one commensal family with its resident dependents, such as widows and servants. Such detached structures, as have no hearth, but are likely to have one or more persons sleeping therein on the night of the final enumeration, should be treated as separate houses, so that no person may escape enumeration.

In towns and cities.—“ House ” means a structure intended for the exclusive residence of one or more commensal families apart from other residents of the street or lane, and includes serais, hotels and the like, when they are not large enough to form blocks ; shops, schools, and other institutions, having no hearth, but which may possibly have some one sleeping therein on the night of the final enumeration should be numbered as separate houses.

It will be seen that, in rural tracts, the old method of treating all buildings with a common courtyard as one house has been abandoned in favour of the separation of each part of a group of buildings which has a separate *chulha* or hearth. The possession of a separate *chulha* is universally recognised as the distinguishing mark of the partial separation of a branch of a family from the other branches and parent stem ; though the separation may be incomplete yet once it has taken place the branch is no longer a member of what is termed a confocal group and its interests and activities rapidly diverge from those of the other branches. Hence in rural areas the definition of house is based on the degree of separation amongst the people residing in it and practically amounts to the residence of a separate family.

On the other hand such a definition would be impossible to apply in towns and cities and here the distinguishing mark of a house has been made to rest on the nature of the structure, though it also includes a modification based on nature of the inhabitants.

This definition has survived the test of two censuses and has been found to fulfil the two main requirements which are:—

That the definition should cover all buildings in which it is likely that people may be found on the census night.

That the inhabitants of the unit selected should be so closely connected that their final enumeration can be completed by reference to one man and without moving from place to place.

But there is one point in which the definition fails and that is that it leads, on account of unintelligent zeal on the part of enumerators, to the selection of large numbers of places as “ houses ” which are most unlikely to be inhabited on the census night. This fault not only leads to unnecessary labour in house-numbering and patrolling but, as the directions provide for the enumeration as if at his residence of a man who is temporarily absent guarding the crops or attending to his well, the treatment of shelters amongst the crops and at the wells as houses may lead to double enumeration.

The Number of Houses in Urban and Rural Areas.

46. The number of occupied houses according to the present census is 5,532,305 in the Punjab and 114,683 in Delhi, and is an increase of only 241,973 over those returned in 1911. The marginal figures show the average number of houses per square mile recorded at the last five censuses, but, owing to the change in definition referred to in the last paragraph no comparison can be established except between the last two figures ; the small increase in the number of houses is shared unequally by the four natural divisions as can be seen from Subsidiary Table VII ; of these, the sparsely populated Himalayan tract naturally has the most widely separated houses and only has 17.5 houses to the square mile as opposed to 70 in the densely populated Sub-Himalayan districts. The changes in the natural divisions since 1911 require little comment, the slight decline in the number of houses in the Sub-Himalayan tract is so small as to be within the margin of error due to individual variations in the interpretation of the definition, and the only feature of note is that the increase in the North-West Dry Area with its large canal colonies has been so small. The towns of the Punjab contain on the average 3,174 houses as against 109 in the average sized village ; in Delhi the city and its suburbs include no less

than 74,183 inhabited houses whilst the outlying villages contain an average of 129.

It is to be regretted that the enumerators treated so many places as houses which were not really likely to be occupied on the census night,—in the preliminary returns over eight million houses were entered and on the census night only 5·6 millions were inhabited ; though the temporary migration due to the drought at the time of the census must have left many houses unoccupied it is impossible to gauge the number which were temporarily deserted owing to the inclusion of most unlikely places for human habitation in the preliminary returns.

47. Throughout the two provinces the average number of residents in each house is remarkably constant, and amounts to 4·3 in Delhi and in the Sub-Himalayan tract, 4·5 in the Himalayan Districts, 4·6 in the Indo-Gangetic Plain and 4·8 in the North-West Dry Area. As the definition of house in rural areas practically ensures that the residents will form one family these figures may also be taken as representing the size of normal families and they show at once how far removed the Punjab is from other parts of India in its family customs ; in it the Hindu joint family system is practically non-existent and the enormous undivided families of Bengal and elsewhere are unknown, the family almost tallies with the European separate family of father, mother and children.

Average
Number of
Residents in
a House.

The remarkable constancy of the number of residents to a house is maintained amongst the individual districts ; Lyallpur shows 5·5 persons to a house and Jhelum only 3·8 but every other district has an average of between four and five people to the house.

Another remarkable feature of the figures for houses is that, in spite of the difference in definition, the number of residents to a house in urban areas (4·4) is very near that in rural areas (4·6).

48. The constitution of families in the Punjab shows every possible gradation from the individualistic systems common in Europe, where every married man with his wife and young unmarried children form a separate family, to the true Hindu joint family system, in which all members of a family connected together by descent from a distant ancestor live together, own their property in common and pool all their individual earnings in the joint coffer for unchallenged administration by the head of the family ; but, except in rare cases, the family resembles the former type far more closely than the latter.

The Family.

In rural tracts, if the father's house is a small one, and it usually contains but one living room, the marriage of a son necessitates the immediate building of another room ; and, though he may continue to use the same courtyard and even the same hearth, it is generally found that within a short time the dissensions of the womenfolk, who have not been brought up from infancy amongst the family, make life inconvenient so that, sooner or later, a separate hearth is established or, more commonly, an entirely separate establishment is set up.

The result is that throughout the country the family using one hearth almost invariably consists of but father, mother and unmarried children with possibly a few dependents of a previous generation ; but in the east, where village sites are compact and building space is very limited, such families have much more tendency to live in close association in one group of buildings than in the west, where there are fewer difficulties in the way of erecting separate houses.

Considerations of space do not form the only reason for variety in the degree of separation common from village to village and from district to district ; as a rule the higher and more orthodox castes of Hindus tend to greater community in living than those whose traditions are less restrictive, and far more than Musalmans who live much more individualistic lives throughout the province ; this fact is partly due to the greater survival of ancient customs amongst the orthodox Hindus but is also largely due to the fact that the proprieties observed by all civilised races discountenance close association between persons who are not prevented from marriage by ties of relationship, so that the existence of strict exogenous customs amongst high caste Hindus permits a wider circle of relations to live together than would be possible amongst peoples where even close relationship is no bar to marriage.

Whilst the large undivided family is practically unknown in the province, its influence can be seen in business relations and in the forms and conditions of

agricultural tenure ; but even the continuation of joint ownership and of joint endeavour in business and agriculture is more a matter of convenience than a result of the force of tradition.

In towns and cities, where the want of building space prevents the easy separations of rural life, Hindu families almost invariably show a far greater degree of the joint constitution ; and, amongst trading classes, the existence of established business firms controlled entirely by the family has still further aided the survival of the ancient systems. But even amongst these old family firms the ties are beginning to change from those of a joint family, whose property and earnings are common and subject to the control of the head of the family, to those of mere partnership, where the capital is held in shares and the profits are subject to periodical distribution.

SUBSIDIARY TABLE I.

Density, Water-supply and Crops.

DISTRICT OR STATE AND NATURAL DIVISION.	Mean density per square mile in 1921.	PERCENTAGE OF TOTAL AREA.		PERCENTAGE TO CULTIVABLE AREA OF		Percentage of gross cultivable area which is irrigated.	Normal rainfall in inches.	PERCENTAGE OF GROSS CULTIVATED AREA UNDER			
		Cultivable.	Not cultivated.	Net cultivated.	Double cropped.			Rice.	Wheat.	Pulses.	Other crops.
	2	3	4	5	6	7	8	9	10	11	12
PUNJAB	183	65	39	59	8	40	27.99	3.9	28.3	12.3	55.5
I. INDO-GANGETIC PLAIN	291	90	69	76	9	32	23.44	2.3	18.4	17.6	61.7
Wheat.											
1. Hissar	157	95	72	75	2	10	15.83	3	2.9	33.8	63.0
2. Loharu State	93	92	68	74	..	..	15.40	..	..	..	100.0
3. Rohtak	205	93	78	83	8	22	19.53	..	9.6	20.4	70.0
4. Dujana State	284	93	73	81	8	..	24.09	..	5.7	11.9	82.4
5. Gurgaon	301	85	68	70	8	13	25.22	..	7.3	16.9	75.8
6. Patandi State	348	85	68	79	8	..	21.46	..	5.7	2	94.1
7. Karnal	265	86	49	57	7	31	29.75	6.0	19.6	17.6	56.8
8. Jullundur	575	89	75	84	22	49	26.85	3	33.9	10.5	55.3
9. Kapurthala State	475	89	75	84	22	26	53.76	1.7	42.2	16.4	39.7
10. Ludhiana	391	91	78	86	12	33	25.97	2	27.2	20.6	52.0
11. Mulerkolla State	481	94	85	91	9	22	20.0	..	14.3	16.1	69.6
12. Ferozepore	250	94	81	86	8	40	17.17	1.1	24.4	33.7	40.8
13. Faridkot State	236	95	91	96	..	..	17.5	..	24.7	1	75.2
14. Patiala State	252	89	67	74	7	10	28.98	1.1	11.3	5.4	82.2
15. Jind State	245	93	68	73	3	13	23.42	0	6.5	7.5	85.4
16. Nabha State	284	97	85	88	9	..	23.42	2	12.4	7.1	80.3
17. Lahore	420	87	64	73	14	74	17.86	1.8	31.2	15.0	52.0
18. Amritsar	583	87	71	82	24	68	24.17	4.5	33.4	9.9	52.2
19. Gujranwala	270	85	54	63	7	69	23.37	15.1	36.5	14.9	33.5
20. Sheikhupura	247	93	54	57	7	83	15.07	10.5	36.7	10.5	42.3
II. HIMALAYAN--	79	24	14	63	29	23	57.65	14.2	32.6	6.0	47.2
21. Nahan State	117	53	12	57	21	8	51.7	7.7	33.4	..	58.9
22. Simla	440	53	14	27	15	6	62.56	7.7	33.4	..	58.9
23. Simla Hill States	56	30	17	57	21	32	51.3	6.9	28.4	13.8	50.9
24. Bilaspur State	219	50	29	58	25	95	56.03	8.3	35.2	14.7	41.8
25. Kangra	77	10	9	56	31	23	74.05	15.3	33.5	1.0	49.3
26. Mandi State	154	22	19	86	42	13	61.22	21.1	31.9	4.3	42.7
27. Suket State	129	22	19	86	42	13	53.7	21.1	31.9	4.3	42.7
28. Chamba State	44	22	19	86	42	13	49.73	21.1	31.9	4.3	42.7
III. SUB-HIMALAYAN--	300	65	49	74	11	20	30.65	4.2	40.1	6.3	49.4
29. Ambala	362	73	58	79	15	6	31.07	8.7	27.1	7.5	56.7
30. Kalsia State	305	61	57	94	11	2	38.72	13.4	25.8	5.5	55.3
31. Hoshiarpur	413	69	49	71	23	10	35.41	3.5	33.0	11.6	61.0
32. Gurdaspur	451	80	66	82	15	27	33.97	6.9	35.0	4.6	53.5
33. Shalkot	522	89	70	78	15	45	32.14	8.3	42.6	2.3	46.8
34. Gujrat	322	82	61	74	7	41	25.98	2.2	40.2	8.4	49.2
35. Jhelum	172	49	36	72	7	4	25.61	1	48.7	3.8	47.4
36. Rawalpindi	281	52	39	75	7	2	32.38	2	41.9	9	57.0
37. Attock	124	49	33	68	5	7	19.94	..	47.8	8.1	44.1
IV. NORTH-WEST DRY AREA.	108	64	24	37	4	77	9.07	3.8	38.0	8.2	50.0
38. Montgomery	154	88	34	39	4	89	10.09	2.2	33.4	5.8	58.6
39. Shahpur	161	73	37	43	4	69	14.65	3	37.2	11.8	50.7
40. Mianwali	60	82	17	21	5	10	11.80	2	34.0	28.4	36.5
41. Lyallpur	301	91	68	75	13	93	13.13	7	39.0	9.1	51.2
42. Jhang	165	90	31	35	4	83	10.05	2	44.9	4.9	50.0
43. Multan	150	89	31	35	3	90	6.62	2.9	38.7	4.3	54.1
44. Bahawalpur State	52	14	12	87	5	79	3.83	10.0	36.7	3.1	44.2
45. Muzaffargarh	94	87	17	20	2	76	5.76	7.7	45.5	6.6	40.2
46. Dera Ghazi Khan	63	74	16	21	1	54	5.94	10.7	32.3	4.4	52.6
BIHAR	823	64	56	87	13	23	27.52	..	16.4	12.4	71.2
I. INDO-GANGETIC PLAIN	823	64	56	87	13	23	27.52	..	16.4	12.4	71.2
Wheat.											
1. Delhi	823	64	56	87	13	23	27.52	..	16.4	12.4	71.2

NOTE.—Figures in column 2 have been calculated from survey area figures, as given in Imperial Table 1. Figures in columns 3 to 7 and 9 to 12 for British Districts have been calculated from areas given in the agricultural statements for 1910-20, and those for States from figures supplied by Census Superintendents. Rainfall recorded in column 8 is that recorded at the headquarters of Districts and States, and is an average for all years for which a record exists; rainfall figures recorded for natural divisions and for the Punjab being averages of those for units, is meaningless. In the following cases figures have been computed from statistics for neighbouring places:—

Columns 3 to 6.—Patandi, Patiala, Nahan.
 Column 4.—Dujana, Kapurthala.
 Columns 9 to 12.—Nahan, Mandi, Chamba.
 Column 8.—Dujana, Jind, Nabha, Bilaspur.

SUBSIDIARY TABLE II.

Distribution of the Population classified according to Density.

PROVINCE OR NATURAL DIVISION.	<i>Tahsils with a population per square mile of</i>											
	Under 150.		150—299 (inclusive).		300—449 (inclusive).		450—599 (inclusive).		600—749 (inclusive).		750 and over.	
	Area.	Population (000's omitted).	Area.	Population (000's omitted).	Area.	Population (000's omitted.)	Area.	Population (000's omitted).	Area.	Population (000's omitted).	Area.	Population (000's omitted.)
1	2	3	4	5	6	7	8	9	10	11	12	13
PUNJAB ..	44,002 (37'00)	3,430 (13'68)	45,035 (39'40)	10,389 (41'39)	18,591 (16'05)	6,869 (27'37)	5,525 (4'77)	2,832 (11'28)	867 (75)	615 (2'45)	1,208 (1'04)	966 (3'85)
I. Indo-Gangetic Plain West ..	1,862 (4'90)	202 (1'77)	22,301 (58'72)	5,291 (46'22)	10,504 (27'65)	3,790 (33'11)	1,716 (4'52)	908 (7'93)	390 (1'03)	290 (2'53)	1,208 (3'18)	966 (8'44)
II. Himalayan ..	11,658 (73'14)	766 (44'07)	4,200 (26'35)	927 (53'34)	32 (20)	10 (58)	..	..	49 (31)	35 (2'01)	..	..
III. Sub-Himalayan	3,571 (18'60)	339 (5'80)	6,174 (32'15)	1,343 (23'0)	5,222 (27'10)	1,943 (33'28)	3,809 (10'83)	1,024 (32'95)	428 (2'23)	290 (4'97)	..	..
IV. North-West Dry Area ..	26,911 (63'02)	2,123 (34'93)	12,960 (30'35)	2,828 (46'54)	2,833 (6'63)	1,126 (18'53)	..	..	..	..	..	..
DELHI (Indo-Gangetic Plain West) ..	..	..	..	..	..	..	..	..	..	..	593 (100'0)	488 (100'0)

NOTE.—The figures within brackets show the percentages of the total area and population.

SUBSIDIARY TABLE III.

Variation in relation to Density since 1881.

DISTRICT OR STATE AND NATURAL DIVISION.	Percentage of variation Increase (+). Decrease (—).				Percentage of varia- tion 1881 to 1921.	Mean density per square mile.				
	1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891		1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11
PUNJAB :	+ 5.5	— 2.4	+ 6.3	+ 10.2	+ 20.7	183	174	178	167	152
I. INDO-GANGETIC PLAIN WEST—	+ 6.8	— 9.5	+ 5.8	+ 10.3	+ 12.5	291	278	301	285	259
1. Hissar	+ 1.5	+ 3.0	+ .7	+ 15.4	+ 21.5	157	154	150	149	138
2. Loharu State ..	+ 10.9	+ 22.1	— 24.4	+ 46.4	+ 49.9	93	81	69	91	62
3. Rohtak	+ 8.0	— 14.3	+ 6.9	+ 5.3	+ 4.3	265	245	286	267	253
4. Dujana State ..	+ 1.4	+ 5.4	— 8.6	+ 12.9	+ 10.3	284	280	266	291	257
5. Gurgaon	— 6.6	— 13.4	+ 10.9	— .2	— 10.5	301	323	372	330	337
6. Patwadi State ..	— 7.4	— 10.9	+ 15.4	+ 6.5	+ 1.4	348	376	422	365	343
7. Karnal	+ 3.5	— 9.6	+ 2.6	+ .8	— 3.2	265	256	283	276	274
8. Jullundur	+ 2.0	— 12.6	+ 1.1	+ 14.9	+ 4.2	575	560	641	634	552
9. Kapurthala State	+ 6.0	— 14.7	+ 4.9	+ 18.6	+ 12.5	475	148	526	501	422
10. Ludhiana	+ 9.8	— 23.2	+ 3.8	+ 4.8	— 8.3	391	356	464	447	420
11. Malerkotla State	+ 12.9	— 8.2	+ 2.3	+ 6.0	+ 13.0	181	426	464	454	425
12. Ferozepore ..	+ 14.4	+ .3	+ 8.1	+ 18.5	+ 40.0	256	224	223	207	174
13. Faridkot State ..	+ 15.6	+ 4.3	+ 8.6	+ 18.6	+ 55.3	236	204	196	180	152
14. Patiala State ..	+ 6.5	— 11.8	+ .8	+ 7.9	+ 2.2	252	237	269	266	247
15. Jind State	+ 13.4	— 3.6	— .9	+ 13.9	+ 23.3	245	216	224	226	198
16. Nabha State ..	+ 5.8	— 16.5	+ 5.4	+ 8.0	+ .6	284	268	321	305	282
17. Lahore	+ 13.0	— .4	+ 11.7	+ 17.0	+ 47.1	420	372	374	334	280
18. Amritsar	+ 5.5	— 14.0	+ 3.1	+ 11.1	+ 4.0	583	553	643	623	561
19. Gujranwala ..	+ 3.0	— 18.1	+ 11.8	+ 14.1	+ 7.6	270	262	320	286	251
20. Sheikhupura ..	+ 19.9	+ 1.8	+ 28.3	+ 16.1	+ 81.6	247	206	203	138	136
II. HIMALAYAN— ..	+ .8	+ 2.0	+ 3.2	+ 6.9	+ 13.4	79	78	77	74	66
21. Nahan State ..	+ 1.4	+ 2.1	+ 9.3	+ 10.5	+ 25.0	117	116	113	104	94
22. Simla	+ 17.9	— 2.6	+ 9.3	+ 2.5	+ 28.6	419	381	391	357	349
23. Simla Hill States	— 1.5	+ 4.3	+ 7.2	+ 10.7	+ 22.0	56	57	51	51	40
24. Bilaspur State ..	+ 5.3	+ 2.5	+ 1.0	+ 6.0	+ 13.2	219	208	203	205	193
25. Kangra	— .6	+ .3	+ .7	+ 4.4	+ 4.8	77	77	77	76	73
26. Mandi State ..	+ 2.2	+ 4.1	+ 4.3	+ 13.5	+ 25.9	154	151	145	139	123
27. Suket State ..	— 1.1	+ .5	+ 4.3	— .1	+ 3.5	129	131	130	125	125
28. Chamba State ..	+ 4.4	+ 6.3	+ 3.0	+ 7.1	+ 22.5	44	42	40	39	36
III. SUB-HIMALAYAN—	+ .7	— 5.3	— 1.4	+ 9.0	+ 2.4	300	298	315	319	292
29. Ambala	— 1.4	— 15.4	— 5.5	+ 4.0	— 18.0	362	367	414	459	442
30. Kalsia State ..	+ 2.6	— 16.8	— 2.1	+ 1.4	— 15.3	305	297	357	396	361
31. Hoshiarpur ..	+ 1.0	— 7.2	— 2.1	+ 12.2	+ 2.9	413	409	440	450	401
32. Gurdaspur ..	+ 1.8	— 11.0	— .4	+ 14.6	+ 3.5	451	443	498	500	436
33. Sialkot	+ .7	— 6.6	— 3.0	+ 9.1	— .3	522	518	555	572	524
34. Gujrat	+ 4.6	— .5	— 1.8	+ 10.9	+ 13.3	322	307	309	315	284
35. Jhelum	— 6.7	+ 2.0	— 2.4	+ 4.0	— 3.5	172	184	181	185	178
36. Rawalpindi ..	+ 3.9	— 1.9	+ 4.7	+ 13.3	+ 20.8	281	271	276	264	233
37. Attock	— 1.4	+ 11.8	+ 3.6	+ .9	+ 15.3	124	126	113	109	108
IV. NORTH-WEST DRY AREA—	+ 9.4	+ 17.9	+ 22.4	+ 13.2	+ 78.9	108	99	84	69	61
38. Montgomery ..	+ 42.3	+ 12.2	+ 3.1	+ 19.6	+ 97.0	154	108	97	94	78
39. Shahpur	+ 11.6	+ 32.1	+ 2.0	+ 24.7	+ 87.6	161	144	109	107	86
40. Mianwali	+ 4.9	+ 13.0	+ 5.2	+ 0.4	+ 36.6	66	63	56	53	49
41. Lyallpur	+ 15.5	+ 43.9	+ 1,854.5	— 25.7	+ 2,313.7	301	261	181	9	12
42. Jhang	+ 8.7	+ 23.1	+ 5.9	+ 3.0	+ 46.0	165	152	123	117	113
43. Multan	+ 9.3	+ 14.7	+ 11.8	+ 14.2	+ 60.1	150	137	120	107	94
44. Bahawalpur State	+ .1	+ 8.3	+ 10.9	+ 13.3	+ 36.2	52	52	48	43	38
45. Muzaffargarh ..	— .2	+ 7.9	+ 6.8	+ 11.9	+ 28.8	94	94	87	82	73
46. Dera Ghasi Khan	— 6.2	+ 6.6	+ 14.2	+ 12.5	+ 28.4	63	67	63	55	49
DELHI	+ 18.1	+ 2.0	+ 8.8	+ 6.4	+ 39.3	823	697	684	629	591
I. INDO-GANGETIC PLAIN WEST—	+ 18.1	+ 2.0	+ 8.8	+ 6.4	+ 39.3	823	697	684	629	591
1. Delhi	+ 18.1	+ 2.0	+ 8.8	+ 6.4	+ 39.3	823	697	684	629	591

SUBSIDIARY TABLE IV.
Variation in natural population.

Serial No.	DISTRICT OR STATE AND NATURAL DIVISION.	Population in 1921.				Population in 1911.				Variation per cent. 1911, 1921 in natural population.	Total excess of immigrants over emigrants during the decade, assuming a death-rate of 20 per mille amongst them.
		Actual population.	Immigrants.	Emigrants.	Natural population.	Actual population.	Immigrants.	Emigrants.	Natural population.		
1	2	3	4	5	6	7	8	9	10	11	
	PUNJAB AND DELHI	25,589,248	712,932	518,809	25,394,925	24,187,750	660,219	516,612	24,044,143	+ 5.6	88,204
	PUNJAB	25,101,060	627,137	549,386	25,023,309	..	..	..	..	..	..
	INDO-GANGETIC PLAIN WEST (TOTAL)—	11,934,904	946,059	743,911	11,732,758	11,027,490	810,967	772,699	10,969,222	+ 6.8	190,598
	INDO-GANGETIC PLAIN WEST (PUNJAB)—	11,446,716	847,724	762,148	11,361,140	..	..	..	..	..	..
1	Hissar	816,810	100,667	139,878	856,021	804,889	136,396	116,814	785,307	+ 9.0	60,974
2	Loharu State	20,621	1,561	4,802	23,862	18,597	5,585	6,000	19,012	+ 25.5	3,232
3	Rohtak	772,272	94,970	93,131	770,433	..	..	..	..	..	..
4	Dujana State	25,833	6,801	5,004	24,126	25,485	6,656	5,618	24,447	+ 1.3	974
5	Gurgaon	682,003	98,313	102,982	686,672	..	..	..	..	..	..
6	Patnauli State	18,097	5,734	2,846	15,209	10,543	6,699	3,209	16,059	+ 5.3	107
7	Karnal	828,720	98,551	84,984	815,159	790,787	106,847	88,306	781,246	+ 4.3	1,406
8	Jullundur	822,544	89,717	209,830	942,666	801,920	86,683	175,808	891,045	+ 5.8	54,247
9	Kapurthala State	284,275	48,571	42,533	278,237	268,133	48,608	45,050	264,485	+ 5.2	3,466
10	Ludhiana	567,622	92,642	111,923	586,903	517,192	84,313	124,563	557,442	+ 5.3	14,354
11	Malerkotla State	80,322	14,698	10,466	82,090	71,144	19,181	18,497	70,460	+ 16.5	2,572
12	Ferozepore	1,098,248	204,998	135,560	1,028,810	959,657	196,074	131,190	893,879	+ 15.1	18,684
13	Faridkot State	150,661	42,492	25,455	133,624	130,294	37,748	25,630	118,176	+ 13.1	8,158
14	Patiala State	1,499,739	233,917	224,375	1,490,107	1,407,659	246,081	240,021	1,401,599	+ 6.3	5,216
15	Jind State	308,183	75,794	58,000	290,389	271,728	72,195	63,926	263,459	+ 10.2	12,421
16	Nabha State	263,334	63,554	61,366	261,136	248,887	63,502	68,982	254,367	+ 2.7	7,313
17	Lahore	1,131,336	236,357	146,069	1,041,048	1,036,158	218,379	123,770	941,549	+ 10.6	16,223
18	Amritsar	929,374	105,814	221,531	1,045,091	880,728	101,831	226,605	1,005,502	+ 3.9	17,664
19	Gujranwala	623,581	80,644	114,040	656,977	..	..	..	..	..	..
20	Sheikhpura	523,135	208,341	17,696	332,400	..	..	..	..	..	..
	HIMALAYAN—	1,737,801	62,696	62,124	1,737,229	1,724,480	66,285	62,314	1,720,509	+ 1.0	2,894
21	Nahan State	140,448	14,550	4,330	130,237	138,520	15,257	4,675	127,938	+ 1.8	1,939
22	Simla	45,327	13,011	12,758	44,174	39,320	16,680	13,588	34,228	+ 29.1	3,245
23	Simla Hill States	306,718	19,190	12,180	299,702	311,236	13,594	11,093	304,735	+ 1.7	5,572
24	Bilaspur State	98,000	9,970	6,347	94,368	93,107	7,468	4,853	90,492	+ 4.3	1,711
25	Kangra	766,065	34,420	53,299	784,944	770,386	41,465	47,118	776,039	+ 1.1	15,952
26	Mandi State	185,048	9,565	7,726	183,200	181,110	3,134	8,410	186,386	+ 1.7	6,733
27	Suket State	54,328	1,592	2,120	54,862	54,928	2,925	1,444	53,447	+ 2.6	1,910
28	Chamba State	141,867	5,184	9,050	145,733	135,873	4,271	11,229	142,831	+ 2.0	1,889
	SUB-HIMALAYAN—	5,838,869	361,564	833,575	6,310,880	5,805,081	361,945	816,387	6,259,523	+ .8	120,506
29	Ambala	681,477	99,014	127,449	709,012	689,970	115,354	129,688	704,304	+ .7	17,853
30	Kalsia State	57,371	18,700	8,460	47,041	55,909	16,980	10,932	49,861	+ 5.7	6,102
31	Hoshiarpur	927,419	62,081	182,123	1,047,461	918,569	61,742	166,941	1,023,768	+ 2.3	39,870
32	Gurdaspur	852,192	77,576	159,886	934,602	836,771	75,325	155,119	916,565	+ 2.0	20,528
33	Sialkot	937,823	68,251	252,489	1,122,601	979,553	78,169	247,977	1,140,361	+ 2.4	53,768
34	Gujrat	824,040	56,286	101,541	869,301	745,634	31,957	112,445	826,122	+ 5.2	21,262
35	Jhelum	477,068	25,862	73,974	525,180	511,075	37,908	62,955	536,622	+ 2.1	31,194
36	Rawalpindi	509,224	82,898	44,845	531,171	547,827	70,296	47,446	524,977	+ 1.2	21,970
37	Attock	512,249	16,830	29,732	525,151	519,273	19,446	28,116	527,943	+ .5	6,629
	NORTH-WEST DRY AREA—	6,077,674	704,146	143,534	5,517,062	5,630,699	730,555	99,125	4,999,269	+ 10.4	61,681
38	Montgomery	713,786	155,803	105,081	663,664	535,299	58,203	106,119	583,215	+ 13.8	96,883
39	Shahpur	719,918	83,310	37,763	674,371	687,306	145,325	35,458	577,499	+ 16.8	47,052
40	Mianwali	358,205	14,818	23,312	360,699	341,377	13,662	24,704	352,419	+ 4.1	377
41	Lyallpur	979,463	474,489	54,587	559,561	857,711	566,320	19,310	310,701	+ 80.1	19,073
42	Jhang	570,569	21,318	77,667	626,908	515,526	23,773	82,376	574,129	+ 9.2	10,518
43	Multan	890,264	102,236	41,764	829,792	814,871	86,089	39,204	767,986	+ 8.0	25,516
44	Bahawalpur State	781,191	84,010	25,444	722,625	780,641	73,151	30,631	738,021	+ 2.1	27,189
45	Muzaffargarh	568,478	20,613	21,347	569,212	569,461	27,698	23,130	564,893	+ .8	4,876
46	Dera Ghazi Khan	495,810	13,115	21,535	504,230	528,447	16,897	18,856	530,406	+ 4.9	7,614
	DELHI	488,188	185,770	69,198	371,616	..	..	..	..	..	..
	INDO-GANGETIC PLAIN WEST.	488,188	185,770	69,198	371,616	..	..	..	..	..	..
	Delhi	488,188	185,770	69,198	371,616	..	..	..	..	..	..

NOTE.—Owing to changes in boundaries the figures for 1911 and 1921 cannot be compared in the cases of Rohtak, Gurgaon, Gujranwala, Sheikhupura and Delhi.

SUBSIDIARY TABLE V.

Comparison with vital statistics (For British Territory only).

DISTRICT AND NATURAL DIVISION.	In 1911-1920 total number of		Number per cent. of population of 1911.		Excess (+) or deficiency (-) of births over deaths.	Increase (+) or decrease (-) of population of 1921 compared with 1911.	
	Births.	Deaths.	Births.	Deaths.		Natural.	Actual.
1	2	3	4	5	6	7	8
PUNJAB AND DELHI ..	8,706,574	7,284,370	43.6	36.4	+ 1,422,204	1 208,152	+ 1,183,021
PUNJAB ..	8,511,153	7,101,805	43.5	36.3	+ 1,409,348	..	+ 1,108,280
INDO-GANGETIC PLAIN WEST (TOTAL)	4,032,958	3,424,762	46.5	39.5	+ 608,196	+ 576,728	+ 617,364
INDO-GANGETIC PLAIN WEST (PUNJAB.)	3,837,537	3,242,197	46.5	39.3	+ 595,340	..	+ 542,623
1. Hissar ..	377,232	294,117	46.9	36.5	+ 83,115	+ 70,714	+ 11,021
2. Rohtak ..	356,501	299,708	49.9	41.9	+ 56,793	..	+ 57,438
3. Gurgaon ..	336,510	358,538	46.1	49.1	- 22,028	..	- 47,824
4. Karnal ..	388,117	353,466	48.5	44.1	+ 34,651	+ 33,913	+ 27,713
5. Jullundur ..	353,093	281,483	44.0	35.1	+ 71,610	+ 51,621	+ 20,024
6. Ludhiana ..	247,486	203,639	47.9	39.4	+ 43,847	+ 29,461	+ 50,430
7. Ferozepore ..	467,256	337,782	47.6	35.2	+ 119,474	+ 134,931	+ 138,591
8. Lahore ..	485,359	379,243	48.5	37.9	+ 106,116	+ 99,499	+ 130,481
9. Amritsar ..	431,570	363,498	49.0	41.3	+ 68,072	+ 39,589	+ 48,578
10. Gujranwala ..	404,413	370,723	38.8	35.6	+ 33,690	..	+ 104,071
11. Sheikhupura ..							
HIMALAYAN— ..	289,128	268,922	35.7	33.2	+ 20,204	+ 18,851	+ 2,570
12. Simla ..	8,286	11,066	21.6	28.8	- 2,780	+ 9,916	+ 6,891
13. Kangra ..	280,840	257,856	36.5	33.5	+ 22,984	+ 8,905	+ 4,321
SUB-HIMALAYAN— ..	2,397,803	2,072,394	41.7	36.1	+ 325,409	+ 54,177	+ 37,449
14. Ambala ..	283,896	273,820	41.1	39.6	+ 10,076	+ 4,708	+ 9,377
15. Hoshiarpur ..	378,297	316,059	41.2	34.4	+ 62,238	+ 23,693	+ 8,850
16. Gurdaspur ..	388,490	324,812	46.4	38.8	+ 63,678	+ 17,937	+ 15,421
17. Sialkot ..	449,019	359,708	48.2	36.6	+ 89,311	- 27,300	+ 6,642
18. Gujrat ..	315,520	267,052	40.0	33.9	+ 48,468	+ 43,179	+ 36,047
19. Jhelum ..	182,993	170,358	35.8	33.3	+ 12,635	- 11,442	+ 34,507
20. Rawalpindi ..	202,907	191,020	37.0	35.0	+ 11,881	+ 6,194	+ 21,307
21. Attock ..	196,081	168,959	37.9	32.5	+ 27,122	- 2,792	+ 7,024
NORTH-WEST DRY AREA— ..	1,986,637	1,518,292	41.9	32.0	+ 468,395	+ 535,018	+ 525,638
22. Montgomery ..	229,082	166,909	45.7	33.3	+ 62,173	+ 80,449	+ 212,270
23. Shahpur ..	268,459	214,742	41.6	33.3	+ 53,717	+ 96,872	+ 74,917
24. Mianwali ..	143,568	115,762	42.0	34.0	+ 27,806	+ 14,280	+ 10,828
25. Lyallpur ..	435,144	258,800	51.3	30.5	+ 176,284	+ 248,800	+ 131,001
26. Jhang ..	231,722	162,445	44.2	31.0	+ 69,277	+ 52,779	+ 45,756
27. Multan ..	330,897	265,634	40.6	32.6	+ 65,263	+ 61,806	+ 76,051
28. Muzaffargarh ..	205,505	187,897	36.1	33.0	+ 17,608	+ 4,319	+ 983
29. Dera Ghazi Khan ..	142,310	146,043	28.5	29.2	- 3,733	- 24,347	- 30,808
DELHI ..	195,421	182,565	47.3	44.2	+ 12,856	..	+ 74,741
INDO-GANGETIC PLAIN WEST ..	195,421	182,565	47.3	44.2	+ 12,856	..	+ 74,741
Delhi ..	195,421	182,565	47.3	44.2	+ 12,856	..	+ 74,741

(1). Vital statistics for 1911 referred to the old district of Delhi and none are available for Delhi for 1912; the figures for 1911 have been adjusted over Delhi, Gurgaon and Rohtak; the average for the years 1913 to 1920 has been taken for the year 1912 in Delhi.

(2). Figures for the actual population of 1911 (columns 4, 5 and 8) are those given in Imperial Table II of 1921.

(3). No vital statistics being available for the trans-frontier tract of Dera Ghazi Khan, its population has been omitted in calculating columns 7 and 8.

(4). Emigrants both of 1911 and 1921, born in unspecified parts of the Punjab have all been included when calculating the first entry in column 7.

(5). Further details will be found in Subsidiary Table V of Chapter VI; births and deaths registered in cantonments are not included in that Table as they are not recorded by sex.

(6). This table includes 38,078 births and 40,650 deaths registered in cantonments.

SUBSIDIARY TABLE VI.

Variation by Tahsils classified according to density.

(a). ACTUAL VARIATION (BRITISH TERRITORY ONLY).

NATURAL DIVISION.	Decade.	VARIATION IN TAHSELS WITH A POPULATION PER SQUARE MILE AT THE COMMENCEMENT OF DECADE OF						
		Under 150.	150—299 (inclusive).	300—449 (inclusive).	450—599 (inclusive).	600—749 (inclusive).	750—899 (inclusive).	1,050 and over.
1	2	3	4	5	6	7	8	9
PUNJAB	1881-1891 ..	- 144,582	- 497,244	+ 883,288	+ 575,609	+ 285,842	+ 663,544	- 33,096
	1891-1901 ..	- 112,325	+ 1,276,262	+ 101,621	- 255,786	+ 246,485	+ 89,096	..
	1901-1911 ..	- 835,475	+ 2,135,950	+ 477,390	- 918,830	- 853,634	- 369,055	..
	1911-1921 ..	+ 106,844	+ 400,648	+ 439,972	+ 2,219	- 384,301	+ 541,069	..
Indo-Gangetic Plain West.	1881-1891 ..	- 86,265	+ 47,634	+ 123,098	+ 237,927	+ 196,810	+ 327,617	..
	1891-1901 ..	- 392,642	+ 247,660	+ 635,628	- 232,629	+ 143,963	+ 395,353	..
	1901-1911 ..	- 164,010	+ 1,090,534	- 447,364	- 604,040	- 341,264	- 369,055	..
	1911-1921 ..	- 9,424	- 251,768	+ 657,206	+ 31,824	- 426,284	+ 542,669	..
Himalayan	1881-1891 ..	- 44,351	- 200,100	+ 288,217	..	- 9,847	+ 83,061	- 33,096
	1891-1901 ..	+ 54,955	+ 237,456	- 288,217	..	..	- 3,391	..
	1901-1911 ..	+ 5,218	- 2,956	+ 162	- 1,183	..	..	..
	1911-1921 ..	- 2,776	- 1,545	- 519	- 27,593	+ 35,003	..	..
Sub-Himalayan	1881-1891 ..	+ 1,802	- 750,709	+ 471,973	+ 337,682	+ 98,879	+ 302,866	..
	1891-1901 ..	+ 6,523	+ 201,794	- 245,790	- 23,157	+ 102,522	- 302,866	..
	1901-1911 ..	+ 44,042	+ 112,163	+ 353,279	- 313,597	- 512,370	..	..
	1911-1921 ..	- 19,145	+ 41,880	+ 9,746	- 2,012	+ 6,980	..	..
North-West Dry Area.	1881-1891 ..	- 15,768	+ 405,931	..	..	..	..	..
	1891-1901 ..	+ 218,839	+ 589,352	..	..	..	..	..
	1901-1911 ..	- 720,725	+ 936,209	+ 571,313	..	..	..	..
	1911-1921 ..	+ 137,189	+ 612,081	- 226,461	..	..	..	..
DELHI	1881-1891 ..	..	..	..	..	+ 11,745	..	..
	1891-1901 ..	..	..	..	..	+ 75,862	..	..
	1901-1911 ..	..	..	..	..	+ 8,038	..	..
	1911-1921 ..	..	..	..	..	- 413,447	+ 448,188	..
Indo-Gangetic Plain West.	1881-1891 ..	..	..	..	..	+ 11,745	..	..
	1891-1901 ..	..	..	..	..	+ 75,862	..	..
	1901-1911 ..	..	..	..	..	+ 8,038	..	..
	1911-1921 ..	..	..	..	..	- 413,447	+ 448,188	..

NOTE.—Figures for 1911 and 1921 are based on those given in Provincial Table I, 1921: adjusted figures have been used for 1901. Adjustment of the figures of 1891 and 1881 (as given in the reports of those years) being impossible, they have been taken without change.

(b). PERCENTAGES OF VARIATION (BRITISH TERRITORY ONLY).

NATURAL DIVISION.	Decade.	VARIATION PER CENT. IN TAHSELS WITH A POPULATION PER SQUARE MILE AT THE COMMENCEMENT OF DECADE OF						
		Under 150.	150—299 (inclusive).	300—449 (inclusive).	450—599 (inclusive).	600—749 (inclusive).	750—899 (inclusive).	1,050 and over.
1	2	3	4	5	6	7	8	9
PUNJAB	1881-1891 ..	- 3.9	- 10.9	+ 23.5	+ 17.0	+ 20.7	+ 154.2	- 100.0
	1891-1901 ..	- 3.2	+ 31.3	+ 2.2	- 6.5	+ 14.8	+ 8.1	..
	1901-1911 ..	- 23.9	+ 40.1	+ 9.0	- 25.0	- 46.1	- 46.5	..
	1911-1921 ..	- 4.0	+ 5.4	+ 8.3	+ 1	- 38.5	+ 127.2	..
Indo-Gangetic Plain West.	1881-1891 ..	- 9.1	+ 2.8	+ 5.0	+ 17.1	+ 26.4	+ 76.1	..
	1891-1901 ..	- 45.3	+ 14.0	+ 25.6	+ 14.3	+ 15.3	+ 59.2	..
	1901-1911 ..	- 46.2	+ 49.5	- 13.6	- 43.2	- 32.3	- 46.3	..
	1911-1921 ..	- 4.9	- 7.6	+ 23.2	- 4.0	- 59.5	+ 127.2	..
Himalayan	1881-1891 ..	- 40.7	- 32.2	..	..	- 100.0	..	- 100.0
	1891-1901 ..	+ 85.0	+ 56.3	- 100.0	..	..	- 10.3	..
	1901-1911 ..	+ 4.4	- 5	+ 1.5	- 4.1	..	..	..
	1911-1921 ..	- 2.2	- 2	- 4.8	- 100.0	+ 100.0	..	..
Sub-Himalayan	1881-1891 ..	+ 6	- 44.3	+ 36.4	+ 17.0	+ 15.9	..	..
	1891-1901 ..	+ 2.1	+ 21.3	- 13.9	- 1.0	+ 14.2	- 100.0	..
	1901-1911 ..	- 14.0	+ 9.4	+ 23.2	- 14.1	- 64.4	..	..
	1911-1921 ..	- 5.3	+ 3.2	+ 5	- 1	+ 2.5	..	..
North-West Dry Area	1881-1891 ..	- 7	+ 76.1	..	..	..	..	..
	1891-1901 ..	+ 9.5	+ 62.7	..	..	..	..	..
	1901-1911 ..	- 26.6	+ 73.1	+ 100.0	..	..	..	..
	1911-1921 ..	+ 6.9	+ 27.6	- 39.6	..	..	..	..
DELHI	1881-1891 ..	..	..	..	..	+ 3.7	..	..
	1891-1901 ..	..	..	..	..	+ 23.0	..	..
	1901-1911 ..	..	..	..	..	+ 1.9	..	..
	1911-1921 ..	..	..	..	..	- 100.0	+ 100.0	..
Indo-Gangetic Plain West.	1881-1891 ..	..	..	..	..	+ 3.7	..	..
	1891-1901 ..	..	..	..	..	+ 23.0	..	..
	1901-1911 ..	..	..	..	..	+ 1.9	..	..
	1911-1921 ..	..	..	..	..	- 100.0	+ 100.0	..

*NOTE.—No entries in the previous decade of the two compared.

SUBSIDIARY TABLE VII.

Persons per house and houses per square mile.

NATURAL DIVISION.	Average number of persons per house.					Average number of houses per square mile.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
	2	3	4	5	6	7	8	9	10	11
1										
Punjab and Delhi	4.5	4.5	6.2	6.6	6.8	41.1	39.6	29.7	27.2	25.1
Punjab	4.5	..	..	..	..	40.4	..	..	..	..
Indo-Gangetic Plain West (Total) ..	4.5	4.4	6.7	7.1	6.8	65.7	64.4	47.1	41.8	40.0
Indo-Gangetic Plain West (Punjab) ..	4.6	..	..	..	..	63.8	..	..	..	..
Himalayan	4.5	4.0	5.0	5.4	6.3	17.9	17.1	15.4	14.7	12.2
Sub-Himalayan	4.3	4.3	6.1	6.7	7.5	70.1	71.2	53.1	48.0	40.0
North-West Dry Area	4.8	4.7	5.9	5.7	5.9	22.7	21.0	15.3	12.6	11.0
Delhi	4.3	..	..	..	..	193.4	..	..	..	..
Indo-Gangetic Plain West	4.3	..	..	..	..	193.1	..	..	..	..

CHAPTER II.

Cities, Towns, and Villages.

49. The definition of village, town and city. 50. Number of towns and cities and population. 51. Accuracy of the census figures. 52. Comparison of the urban and rural population. 53. General movement of the population. 54. Rural population. 55. Distribution of population in villages and towns. 56. Area of villages. 57. Number of persons per occupied house in villages. 58. Inter-relationship of population per village, of area per village, and of persons per occupied house. 59. Boundary and village site positional efficiency. 60. Number of persons per building in selected towns and cities. 61. Number of inhabitants per room. 62. Reference to the statistical tables.

The definition of village, town and city

49. The definition of "village" used in the census instructions was identical with that of an estate under section III-1 of the Punjab Land Revenue Act. Though this definition is based on the technique of the Punjab Land Revenue system, and is therefore suitable for use amongst a staff largely drawn from revenue officials, it will be desirable to explain its meaning to those unfamiliar with Punjab conditions. The definition is as follows :—

" 'Estate' means any area (a) for which a separate record of rights has been made ; or (b) which has been separately assessed to land revenue or would have been assessed if the land revenue had not been released, compounded for, or redeemed ; or (c) which the Local Government may, by general rule or special order, declare to be an estate."

It should be noticed that the definition applies to a demarcated area of land and not to a group of residential sites.

While, therefore, every distinct village will have a distinct area of land comprised in a single closed boundary, it not infrequently happens that a revenue "village" contains no residential site, the owners and cultivators residing in buildings on the residential site of another "village." In such cases the persons concerned are enumerated in the latter village and not in the former. As a general rule in the plains there is one residential site to each village with, here and there, a hamlet or a few temporarily occupied cottages built at a distance from the main village site for the protection of the outlying fields, or for the herding of cattle adjacent to a grazing ground. In the Western Punjab, in tracts into which canal irrigation has not yet penetrated, the well is generally the nucleus of a few residential houses belonging to a single owner and his family, and this well is separated by a considerable distance from similar wells and groups of buildings. In the hills, again, the presence of large residential sites is exceptional, and the houses of the landowners lie scattered over the face of the countryside. Throughout the Himalayan tract the accepted definition of a village renders it misleading as a basis of residential statistics. For example, in the 1868 census report the Kangra district was shown as including 7 towns with a population of over 5,000 persons whereas, as a matter of fact, not a single town existed. Each of these 7 places with over 5,000 inhabitants was an enormous tract of waste land interspersed with cultivation, and its inhabitants lived in small hamlets scattered about over its surface.

For all practical purposes a village in the plains may be thought of as a cluster of houses inhabited by people owning and cultivating the surrounding land ; but the actual unit is included within the boundary of the land, whether cultivated, culturable or unculturable, and not merely within the limits of the residential buildings.

To a very large extent Punjab villages are self-supporting and independent, but, in the case of smaller villages it not infrequently happens that the agriculturist buys his seed, markets his produce and finances his more serious items of expenditure, such as those incurred at weddings or burials by recourse to a neighbouring and a larger village. The larger the village the greater is the probability of finding in it a more efficient doctor, carpenter, ironsmith, or pottery-maker, and with an increased demand for more skilled devices and for better appliances, the more will recourse to distant large villages from the smaller villages be encouraged. This tendency will hasten the transformation of a large village into a larger one and from a larger village into a town. In the Punjab the slowness with which towns have been formed indicates how little the rural population has had to learn hitherto from the urban population.

For census purposes a town has been defined as including—

- (1) every municipality,
- (2) all civil lines not included within municipal limits,
- (3) every cantonment,
- (4) every continuous collection of houses inhabited by no less than 5,000 persons which the Provincial Superintendent may decide to treat as a town for census purposes,
- (5) the capital of every State except the Minor Simla Hill States.

It is clear that this definition aims at a rapid dichotomy (certainly one of the features of a good definition), rather than at a scientific discrimination between towns and villages. A better criterion could probably be based, in the Punjab, on the relative proportion of persons engaged in agriculture to the total population or, on the percentage of persons born in the town or village resident in that town or village. The possibility of applying these tests will be glanced at later.

The census definition of town is the same as that adopted at the 1911 census, except for the addition of category 5.

Of the places which have been treated as towns in the present census 51 are places with less than 5,000 inhabitants. Of these 51 places 28 have necessarily been included by virtue of the first three clauses of the definition, whilst four come in under the fifth clause. The remaining 19 are included either, because at the time of selection their population was estimated at over 5,000, or on account of special reasons, the chief of these being the presence of a bazaar.

The net result is that there are 187 towns included in the Punjab and Delhi at the present census. The figures in the margin

Census.	Number of towns and villages.
1921	187
1911	174
1901	228
1891	221
1881	280

show the number of places classed as towns or cities during the last 5 censuses. The figures prior to 1911 are swollen by the inclusion of all places of 5,000 inhabitants and over in the list of towns, and no deduction as to a change in economic conditions should be made from the crude numbers quoted. Allowance for the varying classification will be made at a later stage.

50. As noted above, the places now treated as towns and cities in the

Places treated as towns in 1921 and not in 1911.

Town.	District.	Population.
Moga ..	Ferozepore ..	14,145
Baghbanpura ..	Lahore ..	10,251
Haikabad ..	Gujranwala ..	8,851
Moham ..	Rohtak ..	7,820
Khanewal ..	Multan ..	5,647
Bhown ..	Jhelum ..	5,572
Sultanwind ..	Amritsar ..	5,572
Shorkot ..	Jhang ..	5,317
Saidon ..	Jind ..	5,199
Nurpur ..	Shahpur ..	5,117
Toba Tek Singh ..	Lyalpur ..	5,041
Shahdara ..	Sheikhupura ..	4,998
Jhawarian ..	Shahpur ..	4,559
Mitha Tiwana ..	Shahpur ..	4,158
Dujana ..	Dujana ..	4,127
Bhalwal ..	Shahpur ..	4,082
Ahmadpur ..	Jhang ..	4,045
Ickhra ..	Lahore ..	3,584
Sheikhupura ..	Sheikhupura ..	3,487
Pataudi ..	Pataudi ..	3,342
Suket ..	Suket ..	2,554
Sikharwal ..	Shahpur ..	2,205
Phulwara ..	Shahpur ..	1,926
Amloh ..	Nahan ..	1,543
Total ..	24 ..	123,145

Punjab are 187 in number, and have an aggregate population of 2,901,098 persons as against the 174 towns and cities with 2,567,282 inhabitants in 1911. The places which have been treated differently at the last two censuses are noted in the margin, and it would be wrong therefore, to speak of the change in the urban population as a rise from 2,567,282 to 2,901,098 without consideration of the effect of the altered classification.

A truer basis of comparison for the changes in the urban population of the Punjab will be set out in para. 3 below.

The omission of Shahpur from the list of towns in 1921 needs special justification. At one time it was the headquarters of the district, but these have been transferred to the more easily accessible and rapidly growing town of Sargodha. In 1911 3,131 inhabitants of the inhabitants of Shahpur lived in the civil lines, whilst the population of the town proper is only 5,608, and has been declining rapidly during the last 10 years.

The other omissions need no special remark. They are all of places which

Number of towns and cities and population.

Places treated as towns in 1911 but not in 1921.

Town	District.	Population.
Shahpur	Shahpur	8,739
Garhshankar	Hoshiarpur	4,923
Miani	Hoshiarpur	4,870
Chawinda	Sialkot	4,605
Kalanaur	Gurdaspur	4,006
Anandpur	Hoshiarpur	4,011
Akalgarh	Gujranwala	3,943
Dasuya	Hoshiarpur	3,597
Khaana	Ludhiana	3,319
Farukhnagar	Gurgaon	3,158
Khudian	Lahore	2,902
Total	11	45,883

had a population of less than 5,000 in 1911, and all have been declining rapidly since 1901. The new inclusions comprise 13 towns with a population of less than 5,000, but three of these are the capitals of States, and one the headquarters of a district. All the others are rapidly growing places of markedly urban characteristics, and the majority of them are in the canal colony areas where a town, once successfully established, usually exhibits a mushroom growth.

No formal definition of "city" was adopted for census purposes, but for administrative convenience Government has

decided that Delhi, Lahore, Amritsar, and Multan should be classed as cities in this report. Rawalpindi, with a population of over 100,000, which owes a very large part of that population to the existence of Cantonments, and is not an industrial centre, has not been classed as a city. On the other hand, Multan has been ranked as a city although its population is recorded at the census as only 84,806, its normal population being temporarily reduced owing to its partial desertion at the time of the census on account of a severe epidemic of plague.

Accuracy of
the Census
figures.

51. As it is necessary before making any deductions from the statistical data collected at a census to have a clear idea of the probable accuracy of the enumeration and classification, a few remarks on this subject are here interpolated. So far as the present writer has been able to discover no systematic objective test of the accuracy of the census figures has been applied to them, and each Provincial Superintendent has formed his own subjective estimate, which naturally varies with his belief in his own thoroughness and the degree of reliance that he places in the enumerators and supervising staff. While no doubt each Superintendent is perfectly entitled to have his own opinion on the accuracy of the census work, at the same time this opinion will have only a slight scientific weight unless it is supported by the internal evidence of the figures, or by a corroborative independent test. In this matter of the enumeration of the tahsil, district or provincial population by sexes and religions it is impossible to do more at the present stage than to guess at the amount of error. At the same time I must confess to scepticism as to the high degree of accuracy which has been claimed for the figures by many Census Superintendents. Familiarity with the inaccuracies of the statistical data collected in India from similar sources as those on which the census figures are based, emphasises the need of caution. In the Punjab I have found gross errors in price statistics, in the revenue records, and even in the recorded areas of crops, which are reputed to be as accurate as any in the world, and in the estimates of yield on which the final outturn of the crops is computed. Vital statistics too are known to be very unreliable. *A priori*, therefore, there is good ground for doubting that the census figures possess the extreme accuracy which is claimed for them.

The weight of high authority is against the view taken above, and it is only with extreme diffidence that I venture to differ from the opinions hitherto expressed on this subject. Thus Sir Denzil Ibbetson in his report on the 1881 census writes—"I believe that the results of the census, so far as regards the actual enumeration of the people by sexes, are wonderfully accurate The probability of the concealment of females, the only direction in which any suspicion of material error can arise is discussed on the chapter of sex." Sir Edward MacLagan, present Governor of the Punjab, says on page 28 of the census report of 1891, "there is very little doubt, that, as far as actual enumeration goes, the census of 1881 was carried out with remarkable accuracy, and almost every district officer is of opinion that the present census also was extremely accurate." Sir Edward MacLagan remarks however that "as regards the absolute value of the figures (of births and deaths), I believe them to be utterly unreliable."

Mr. H. A. Rose, in his report on the 1901 census seems to have entertained no doubts as to the absolute accuracy of his figures.

Rai Bahadur Pandit Hari Kishen Kaul on page 197 of Part I of the report of the census of 1911 says, "no statistics compiled at an Indian Census are

probably more removed from the actual facts as those of "age." He then summarises the various causes which led to a preference for grouping children under one age rather than another; but, he does not appear to have doubted the accuracy of his totals independently of the age grouping.

Mr. Middleton in an interesting examination of the errors in the vital statistics of the province based his calculation on the assumption of absolute accuracy in the census totals at the two decades 1911 and 1921. The line of reasoning adopted is open to criticism,* but the point here insisted on is the assumption of complete accuracy in the census figures.

Mr. Thompson in his report on the present 1921 census of Bengal, reaches the conclusion that the Bengal census figures have a high degree of accuracy, and that possibilities of excess enumeration would be likely to counterbalance the probabilities of omissions. He says "it may be considered very unlikely that the census total is out as much as 1 *per mille* and it is probable that it is very much more accurate."

Practically the only dissentient view is expressed in the Actuarial Report of Mr. Acland (Chapter 5, Government of India Census Report, 1911, page 158, volume I, part I) when, after describing the fitting of the provincial age data by a graduation formula, he says "in the case of the Punjab the figures were not found amenable to treatment by this method, and this was one of the many indications that the figures in this province are not complete or reliable;" and, again, on page 166 "I was ultimately driven, reluctantly, to the conclusion that no useful purpose could be served by publishing the mortality table for female lives in the Punjab, and have thus had to follow, in this respect, the course adopted by Mr. Hardy, in his report on the 1901 census."

Mr. Gait in paras. 264—267 of volume I, part I, of the Government of India Census Report of 1911, has dissented very vigorously from Mr. Acland's views.

At this stage I would have preferred myself not to express any opinion, but, as some measure of the inaccuracy of the data has to be implicit in all the arguments that may be advanced as to the spatial or temporal variation of the population, it is necessary to adopt a conventional standard of the probable inaccuracy. As a working hypothesis, therefore, I have assumed that the mean error for the totals by religions and sexes by each territorial division is 1 per cent. This figure has been adopted because, on one hand, most, if not all, Census Superintendents regard the figures as considerably more accurate than this, and, on the other hand, because all the Punjab statistics that I have yet come across in 17 years' experience have average errors in excess rather in defect of this amount; and partly also because as a District Officer in Jullundur the concealment of the existence of female children was a matter of continual report and observation. Lastly, even the most cursory examination of the age distribution figures indicates that there must be an enormous number of omissions of children under the age of 5. In 28 out of 29 districts in British Territory in the Punjab there is an excess of persons in the age group 5—9 over that in the group 0—4 years of age, and this can only be accounted for in five ways—

- (1) By an excess of immigrants who in March 1921 would be between the ages of 5 and 9, or an excess of emigrants who would in March 1921 be of the ages of 0—4.
- (2) By a great excess in the number of the births in the years 1911—1914 as compared with the birth in the years 1915—1920.
- (3) By a differential death-rate adversely affecting the children born in the quinquennium 1915—1920.
- (4) By the transfer of children from the 0—4 age group to the 5—9 age group by misstatement or misclassification.
- (5) By the actual omission of children below the age of 5.

In the first place it should be noted that the discrepancy in the numbers of the two age groups occurs for male as well as for female children and, therefore, no explanation is valid by reference to mere concealment of female births.

As to the first possibility, it may be said that there is no reason to suppose that Punjab families during 1915—1920 emigrated when the bulk of their children were between the ages of 0—4, as compared with the numbers that emigrated when the children were aged 5—9; nor, on the other hand that families from outside the

* See Appendix I for an analysis of the errors arising from incorrect census figures in judging of the accuracy of vital statistics.

province particularly selected that period to emigrate at which their children were between the ages of 5—10. It seems probable indeed that those tribes which are essentially nomadic in their habits such as the Odh, Purbia or Gadaria travel with equal facility whatever the age of their children. The discrepancy between the numbers in the age groups can, therefore, not be explained from this cause.*

As to possibility (2) a complete test can only be applied after allowance for the number of deaths among the children born during the decade 1911—1921. This test was not applicable owing to the fact that deaths are not recorded in the annual Sanitary Reports for each year of age, and all that is now possible to do is to point out that the number of births during the two quinquennia of the decade 1911—1920 (inclusive) were as follows:—

Quinquennia.	Males.	Females.	Total.
1911—1915 ..	2,269,989	2,070,721	4,340,710
1916—1920 ..	2,175,653	1,956,743	4,132,396

It will thus be seen that there has been an excess in the number of births in the quinquennium 1911—1915 which will however explain † less than 5 per cent. of the excess in the numbers of age group 5—9 over that in the age 0—4 at the census of 1921.

As to possibility (4) namely, the transfer from age group 0—4 to age group 5—9 owing to the misstatement, Pandit Hari Kishen Kaul makes some valuable observations in para. 288 (a) of his Punjab Census Report for 1911, but the net result of the various influences leading to misstatement of children's ages would not appear to be any inflation of the age group 5—9. In fact as Pandit Hari Kishen Kaul points out there would be a considerable incentive to exaggerate the ages of male children between the ages of 5 and 10, in order to allow of their employment without infringing the provisions of the Factory Act. Such exaggerations will often be ludicrous in the extreme, the age of a boy of 8 or 9 often being stated at about double that figure. Any depression of a girl's age from over to under 10 years, helping to swell the age group 5—9, will therefore be more than offset by exaggerations in the ages of male children. The discrepancy in the age groups cannot be accounted for on this basis. While, therefore, it is not asserted that the above qualitative analysis is complete, it suggests that some part of the discrepancies in the first two age groups is due to the omission of children between the ages of 0 and 4 years of age. According to the tables by Mr. Acland for the 1911 census the age group 0—4 should contain 317,742 males as against 256,778 females in the age group 5—9. These figures apply of course to a stationary population, but if we use them as approximately valid to the Punjab population figures we find that the age group 0—4 should be 23·7 per cent. in excess of the age group 5—9, and not, as we find, anything up to 14 per cent. in defect.

Evidence as to the unreliability of the census of the number of inhabitants per building carried out in Lahore, Amritsar, Rawalpindi and Jullundur, though, of course, the accuracy to be expected is much less than that of the census proper, is afforded by the statistics themselves. Thus by adding up the number of buildings with the specified number of inhabitants per building, it is found that in the case of wards 1—6 of Lahore City, there must be no less than 117,140 inhabitants as against 92,533 enumerated in the census. The difference of over 24,000 cannot be accounted for except by the inaccuracy of one or the other of the enumerations. In the case of ward 3 of Rawalpindi City the discrepancy is even more marked.‡

Summing up, therefore, an average inaccuracy of one per cent. would appear not to be an unreasonable working figure for the totals by religion and sex. In the absence of proof to the contrary the assumption of greater accuracy would be extremely unwise, and the possibility of even greater errors in particular classifications must be borne in mind in all the succeeding chapters.

52. Owing to the differences of definition and the consequent changes in the number of places classed as towns at the various censuses, a perfect comparison of the percentage of the urban population at various epochs is not possible.

Comparison
of the Urban
and Rural
Population.

* It might be argued, of course, that there might have been a long influx of very young children during 1911—1915 (who would be between 5—9 in 1921) or an efflux of very young children during 1916—1921, or, that large numbers of children between 5—9 had come into the Punjab just before the 1921 Census. William of Occam's razor would cut through most of these assumptions.

† In view of the inaccuracy of the vital statistics one cannot be confident that the births did really fall off in the last half of the decade, when administrative routine was less rigid owing to the war and to internal disturbances.

‡ Other cases in which the figures are open to suspicion will be referred to later on. In the present chapter such an instance is dealt with in paragraph 51.

The actual percentage of the urban on the total population, adopting the actual classification of towns used at each of the censuses, is shown in the margin. Roughly speaking therefore, the urban population of the Punjab can be put at 10 per cent. of the whole, and there is no sign of a marked tendency for persons to flock into the towns and cities. Further details will be found in the subsidiary Table V attached to this chapter, which gives also the figures for Delhi Province, where the urban population is now 62·4 per cent. of the whole.		
Census.	Percentage of the urban population of the Punjab excluding Delhi.	
1881	10·7	
1901	10·6	
1911	9·8	
1921	10·3	

Another way of looking at the changes in the urban population, which avoids one of the pitfalls of classification, is to consider the changes of population of only those towns which have been classed as towns at all 5 censuses since 1881. This mode of comparison is open of course to the objection that it omits from later censuses those towns which have sprung up in recent years: for example, in the Lower Chenab, Lower Jhelum and Lower Bari Doab Colonies, and also it omits from the earlier censuses those places which were properly classed as towns in 1881 or 1891, but have since ceased to have distinctively urban characteristics. With this warning in mind, reference may now be made to subsidiary Tables VII and VIII, which give the actual population of 157 towns and cities

Punjab Towns which have risen steadily in population since 1881.

Lahore.	Bathinda.	Jaitu.
Jullundur.	Montgomery.	Pathankot.
Sialkot.	Kot Kapura.	Jampur.
Gujranwala.	Fazilka.	Bhakkar.
Kasur.	Fardkot.	Muzaffargarh.
Jhang Maghiana.	Muktsar.	Karor.
Simla.	Mianwali.	Delhi.
Rohtak.	Leiah.	Campbellpur.

classed as towns and cities at all 5 censuses since 1881 inclusive, and also the changes in population whether positive or negative in each of the 4 inter-censal decades. Table VIII is instructive in this respect as it shows that since 1881 only 24 towns and cities have made uninterrupted progress throughout the last 40 years. These towns are noted in the margin.

On the other hand 9 towns have been uninterruptedly on the down grade during the last 40 years. These towns are noted in the margin in order of population. Of these steadily decaying towns the Ambala District contributes 2, the Gurdaspur District 3, and Jhelum, Jullundur, Gurgaon and Simla 1 apiece.

Punjab Towns which have steadily diminished in population since 1881.

Pind Dadan Khan.	Dera Baba Nanak.
Sadhaura.	Dinanagar.
Rahon.	Buria.
Sujanpur.	Dagshai.
Faridabad.	

In both marginal lists the towns are shown in descending order of population as found at the 1921 census.

Adopting the same classification, viz., counting the urban population as the number of persons residing in the 158 places classed as towns or cities at each of the last 5 censuses, the percentage of urban on total population is as noted in

Census.	Percentage of urban on total population.
1881	9·6
1891	9·5
1901	9·0
1911	9·4
1921	9·6

the margin. These figures are lower than the percentage of the urban population given previously, the reason for this being, of course, that some towns have been excluded in the latter classification, owing to their not having been treated as towns at each of the 5 censuses. Both sets of figures, however, show the same general trend, namely, that of a fall in the urban population in 1901 and 1911, and a subsequent rise in 1921. Those in favour of the industrialisation of the Punjab will deplore, while those who desire the maintenance of agriculture in its premier position may approve of the absence of any marked tendency of the population to congregate in towns.

53. In respect of urbanisation the truth of the matter is that, up to the present, the movement of the population of the Punjab has been towards occupying the desert spaces which canal irrigation has rendered fertile, and it is only when this process has been completed and the mother liquor ceases to be in a state of flux that crystallisation in the shape of towns will take place. The general movement of the population has been ably discussed by Mr. Middleton in chapter I; but, as it is relevant to the subject in hand a different presentation

General movement of the population.

of the data is proposed. For this purpose reference is made to the diagrams Nos. 17, 18, 19 and 20 showing the isopleths of population density for the 4 censuses from 1891—1921, inclusive. These diagrams show very clearly what the movement of the population has been. Thus, before the introduction of canals it is clear that the lines of equal density of population ran roughly parallel to the lines of equal annual rainfall, the most densely occupied area being that lying between 20" and 35" of annual rainfall. With the introduction of the colony canals the lines of equal population density, which ran originally very close to each other, have in the recent decades moved towards the south-west. No more than 20 years ago a comparatively small area of land round Multan formed a population oasis. In 1891 the contour line of a 100 persons per square mile, which enclosed the oasis of Multan, was distant no less than 160 miles from the general contour line of density 100. Since 1891 however, owing to the development of the Lower Jhelum, Lower Chenab and Lower Bari Doab Colonies the general 100 density line has advanced towards Multan at an average rate of about 10 miles per annum, and in 1911 Multan had been turned, from the point of view of population, from an island into a narrow-necked peninsula. The whole trend of events, as to which a great deal more might be said, in particular about the shape and changes in the isopleths round Amballa and Delhi, is very clearly brought out in the diagrams.

With the construction of the Sutlej Valley Canal, the Bhakra Dam and the Sindh-Sagar Canal there will be a tendency for the population isopleths to resume their original parallelism with the lines of equal rainfall, the reason for this being that in the Punjab, whether wholly unirrigated or wholly irrigated, the density of population must depend on the differential advantage conferred by the rainfall. So long as the Punjab was, and is, only partially irrigated by perennial canals, the canals and not the rainfall will be the dominating factor in deciding the shape of the density isopleths. It should be noted that while the isopleths of lower population density have moved out rapidly in a south-westerly direction in the last 30 years, the isopleths of higher population density have moved at a less rapid rate. Thus between 1891—1921 the isopleths of 200 persons per square mile have moved in a south-westerly direction from Lahore to an extent of about 70 miles, viz., at a rate of 2·3 miles per annum as compared with the annual rate of movement of 10 miles per annum of the 100 density line, while the 300 density isopleths have only moved during the same interval at a rate of a little over 1 mile per annum. It seems probable that the movements of the isopleths will continue in the same direction for some years to come, with a tendency, as suggested above, to a greater parallelism with the isohyets, provided of course there is no untoward interruption of the Punjab's colony development.

As noted, therefore, the population of the Punjab has, of recent years, been too much in a state of flux towards sparsely populated areas for the formation of towns to have taken place. It may be possible to hazard a guess that when the movement of population becomes very slow, or ceases, the process of formation of towns is likely to be accelerated. At any rate so much may be asserted that the cultivator in the canal colonies is beginning to appreciate the fact that in order to be a successful farmer he must sell his produce successfully, as well as grow it successfully, and he is, therefore, desirous of more and better organised markets close to the areas on which he raises his crop; and though something has been done in the past to provide these facilities, no one would venture to assert that he has at present either adequate markets or adequate means of reaching them. When means of communication have been improved there is likely to be a rapid growth of the numbers and extent of Punjab towns. Want of good roads and railways are undoubtedly the limiting factors in preventing villages turning into towns with more readiness than they have done in the past.

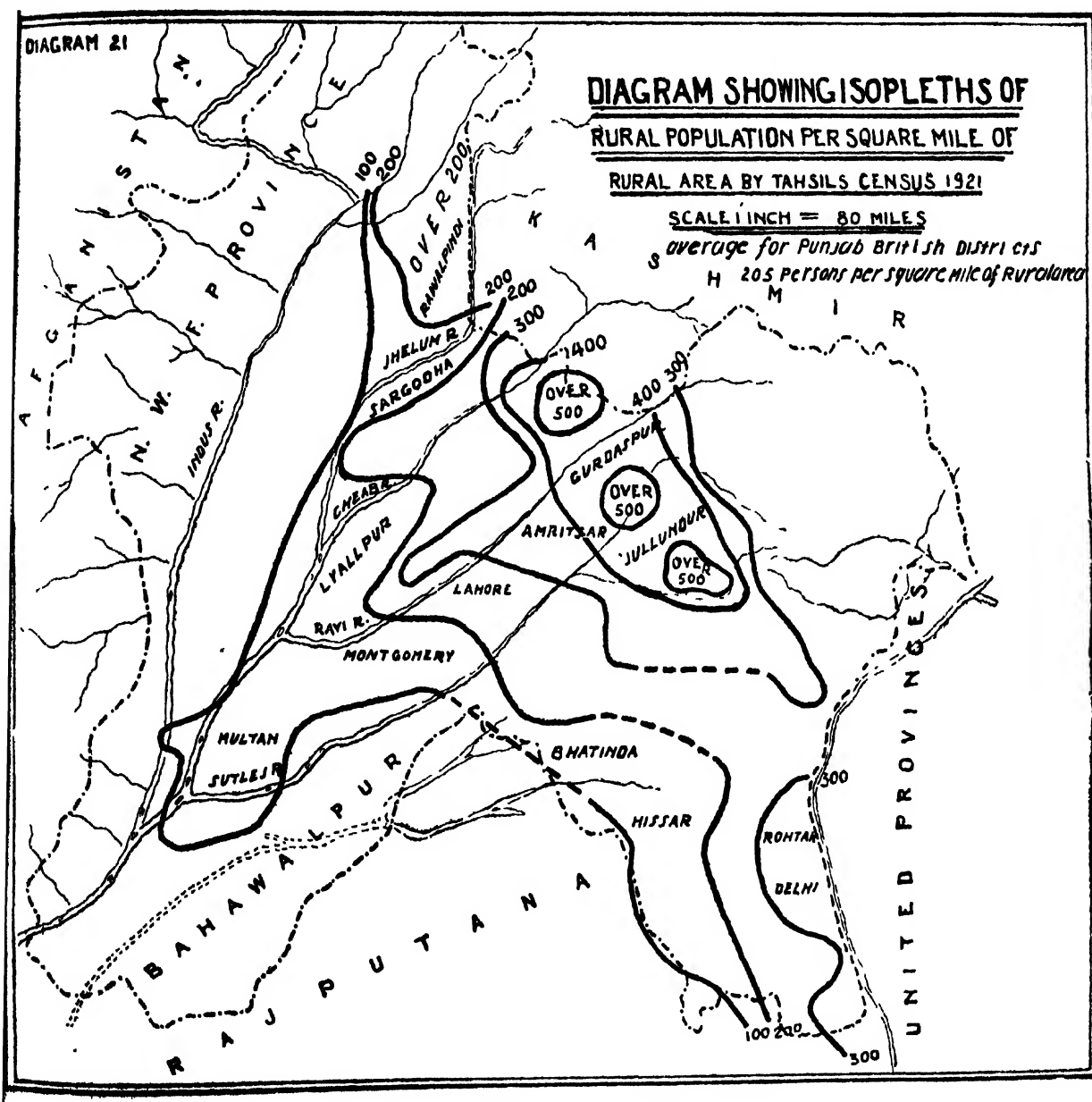
Rural po-
pulation.

54. The diagrams which have been printed in the foregoing sections give the general population density, viz., the density based on the population in both towns and villages, this course being necessary because the rural density by tahsils, without which detail it would be impossible to draw the isopleth curves, was not available for all the Punjab censuses. Apart from this fact, however, the general population density has a value of its own. For the purposes of discussion of the purely rural population, reference may be made to diagram 21 which shows the rural population density per square mile. The figures required for

drawing this diagram were obtained—

- (1) by excluding from each tahsil the population of the towns of that tahsil, and
- (2) by excluding from the area of the tahsils the so called revenue area of the towns situated in that tahsil.

It was by no means easy at this stage to obtain reliable figures of the revenue area attached to towns, as it involved reference to all the districts of the Punjab. Where, however, there was a clear error in the return sent in, a further reference was made to the revenue authority concerned, and the figures finally used may be accepted as approximately correct. The aforesaid revenue area includes a good deal more than the mere sites of the towns concerned and the adjoining waste, and in some cases the arable land included in the revenue area exceeds the area under buildings and roads in the town itself.



Similarity between diagram 21 of the density of rural population with that of diagram 20 of the general population density is evident. The three islands of high density round Jullundur, Amritsar and Sialkot are shown in both diagrams, while, as was to be expected, the border density curve of a 100 persons per square mile is almost identical in both cases. On the other hand, the projections of advancing population in the Lower Jhelum and Lower Chenab Canal Colonies are even more marked than before. It is rather unsafe to argue from lines of equal density based on tahsil figures only, but, as it stands, diagram 21 shows that

the maximum population density gradient lies between Daska and Gujranwala. A diagram of population density based on a smaller division of area, say an assessment circle or a zail, would be considerably more accurate than the diagram now presented; but time forbids its preparation.

Distribution
of population
in villages and
towns.

55. The actual distribution of the population in towns and villages for each group of 500 persons is given in the margin.

Frequency of towns and villages with a population between the limits named.
British Territory only.

Population limits.	Frequency.	Population limits.	Frequency.
0-499 ..	21,958	10,500-10,999 ..	3
500-999 ..	7,528	11,000-11,499 ..	5
1,000-1,499 ..	2,577	11,500-11,999 ..	1
1,500-1,999 ..	106	12,000-12,499 ..	3
2,000-2,499 ..	406	12,500-12,999 ..	1
2,500-2,999 ..	241	13,000-13,499 ..	1
3,000-3,499 ..	164	13,500-13,999 ..	0
3,500-3,999 ..	97	14,000-14,499 ..	2
4,000-4,499 ..	57	14,500-14,999 ..	1
4,500-4,999 ..	52	15,000-15,499 ..	2
5,000-5,499 ..	33	15,500-15,999 ..	0
5,500-5,999 ..	21	16,000-16,499 ..	1
6,000-6,499 ..	14	16,500-16,999 ..	0
6,500-6,999 ..	11	17,000-17,499 ..	1
7,000-7,499 ..	9	17,500-17,999 ..	2
7,500-7,999 ..	13	18,000-18,499 ..	1
8,000-8,499 ..	8	18,500-18,999 ..	0
8,500-8,999 ..	5	19,000-19,499 ..	0
9,000-9,499 ..	4	19,500-19,999 ..	0
9,500-9,999 ..	4	Over 20,000 ..	24
10,000-10,499 ..	3		

This distribution could be fitted with a Pearsonian curve of type J,* but is extremely doubtful whether it really represents the facts as it is certain that the frequency of villages with a very small population decreases as the population diminishes, the modal population being probably between about 3 to 5 hundred persons per village.

The mean population per village for British Districts is 546, and for the areal distribution of the various sizes of villages diagram 22 may be referred to. This diagram is a remarkable one because it shows that, with the exception of Multan, the location of villages with a population of 800 persons and over constitutes a well-defined series of knolls, running roughly parallel to the Himalayas, but distinctly further away from them than the area of greatest density

of population. This fact is conformable with (but not necessarily explicable by) the South-westerly movement of the population, which has resulted, apparently, in people who are emigrating to a new territory preferring to attach themselves to villages already built rather than to build new ones. The inevitable dependence of the old Punjab on the rainfall is very clearly shown by the line of 500 persons

*The actual values of the constants found for this distribution were, after applying the full correction for abruptness at the beginning of the range and Sheppard's corrections,

$$\mu_2 = 4533$$

$$\mu_3 = 32821$$

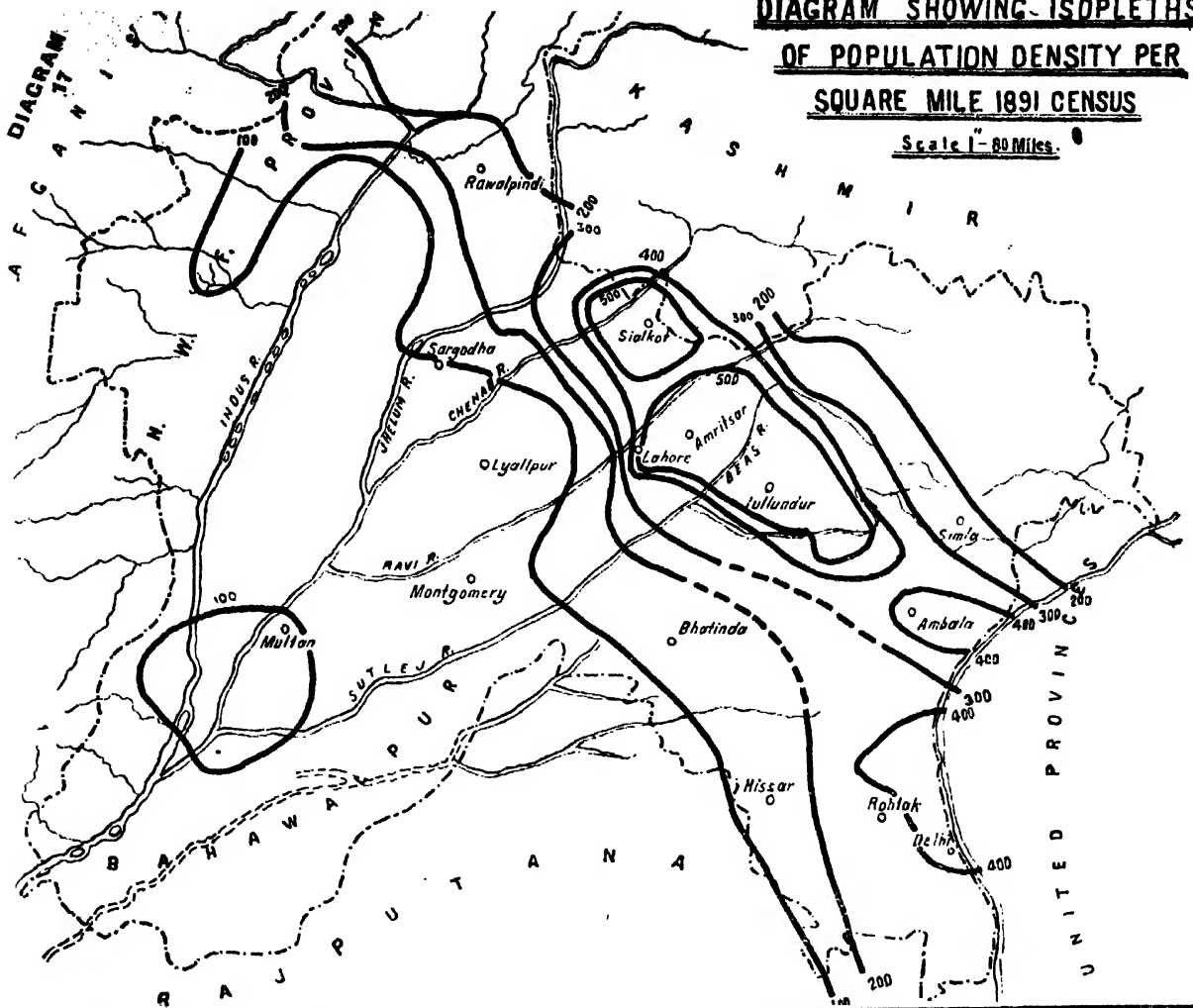
$$\mu_4 = 319162$$

$$\text{which give } \beta_1 = 115.58, \beta_2 = 155.31.$$

This makes the criterion $\kappa < 0$ and a type J curve is indicated.

**DIAGRAM SHOWING ISOPLETHS
OF POPULATION DENSITY PER
SQUARE MILE 1891 CENSUS**

Scale 1" = 80 Miles.



**DIAGRAM SHOWING ISOPLETHS
OF POPULATION DENSITY PER
SQUARE MILE 1901 CENSUS**

Scale 1" = 80 Miles.

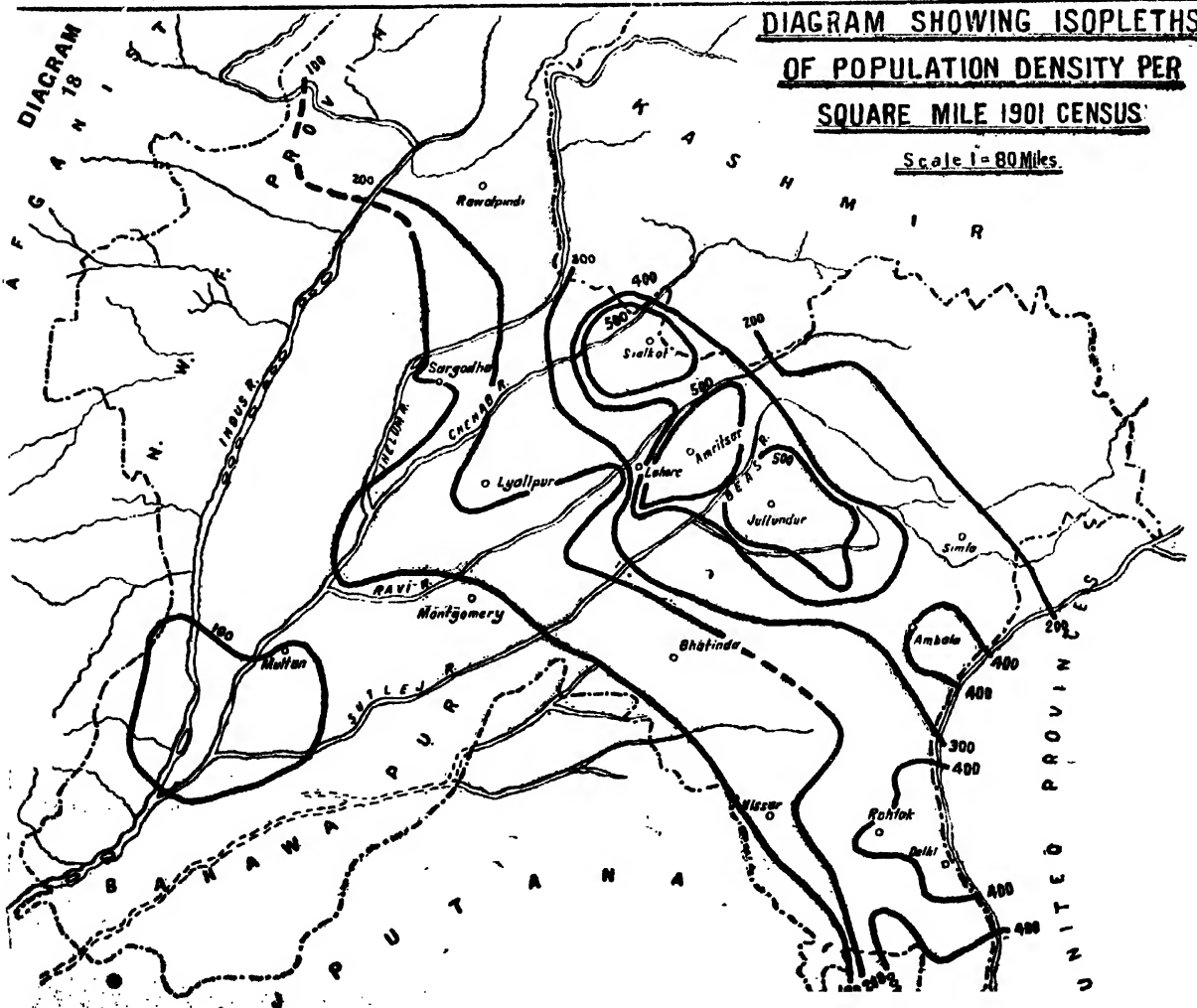


DIAGRAM 19

**DIAGRAM SHOWING ISOPLETHS
OF POPULATION DENSITY PER
SQUARE MILE 1911 CENSUS**

Scale 1" = 80 Miles

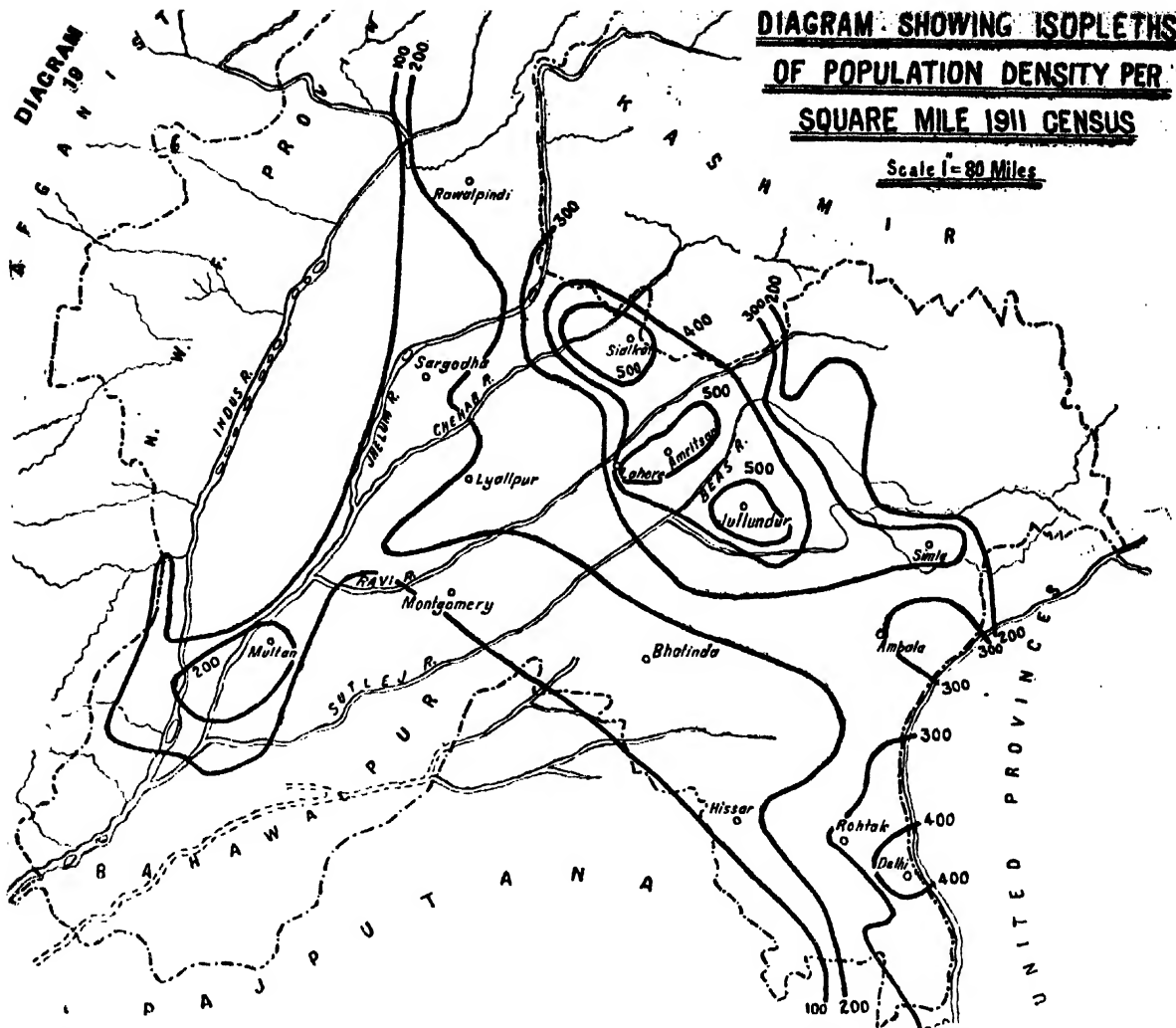
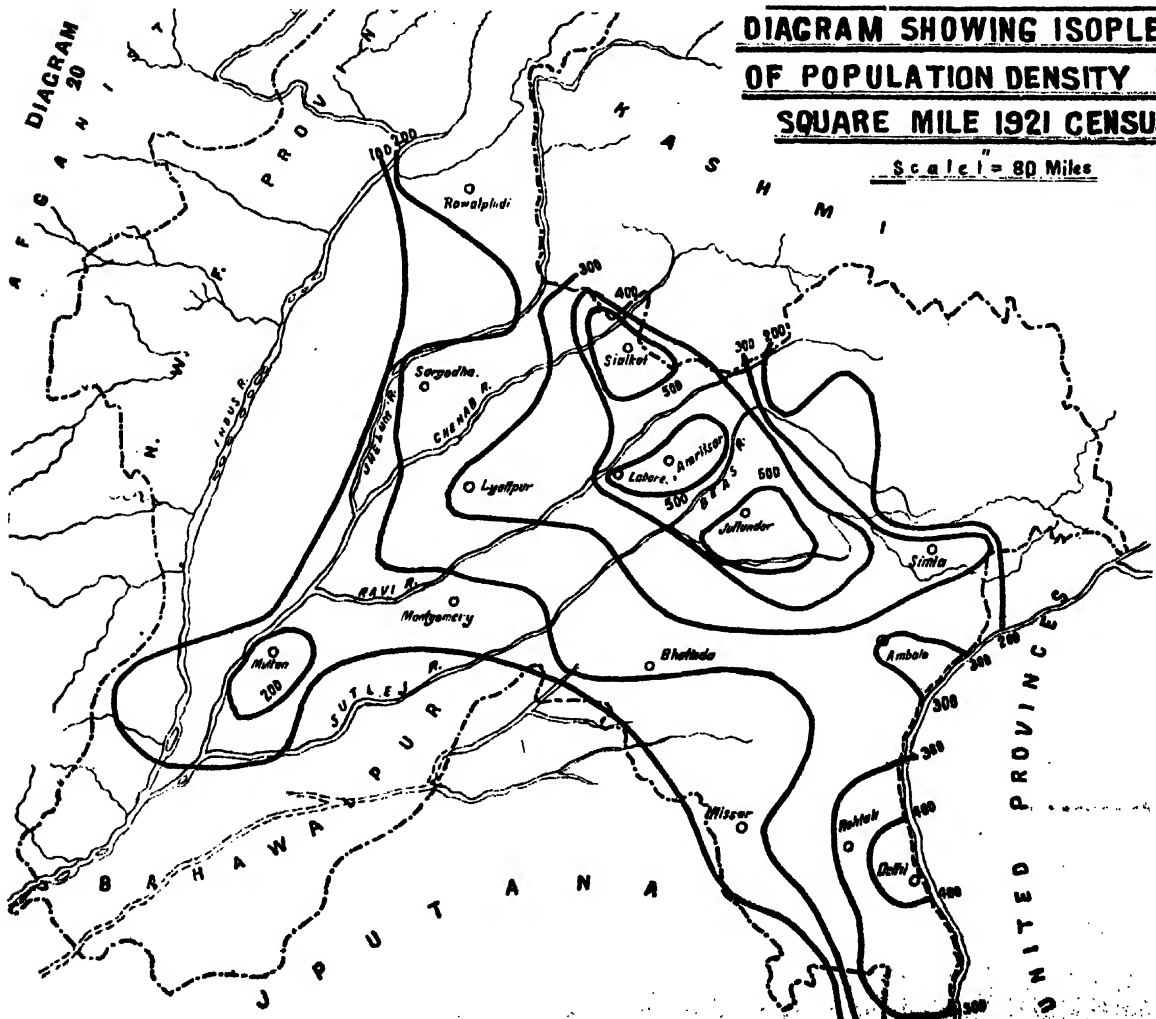


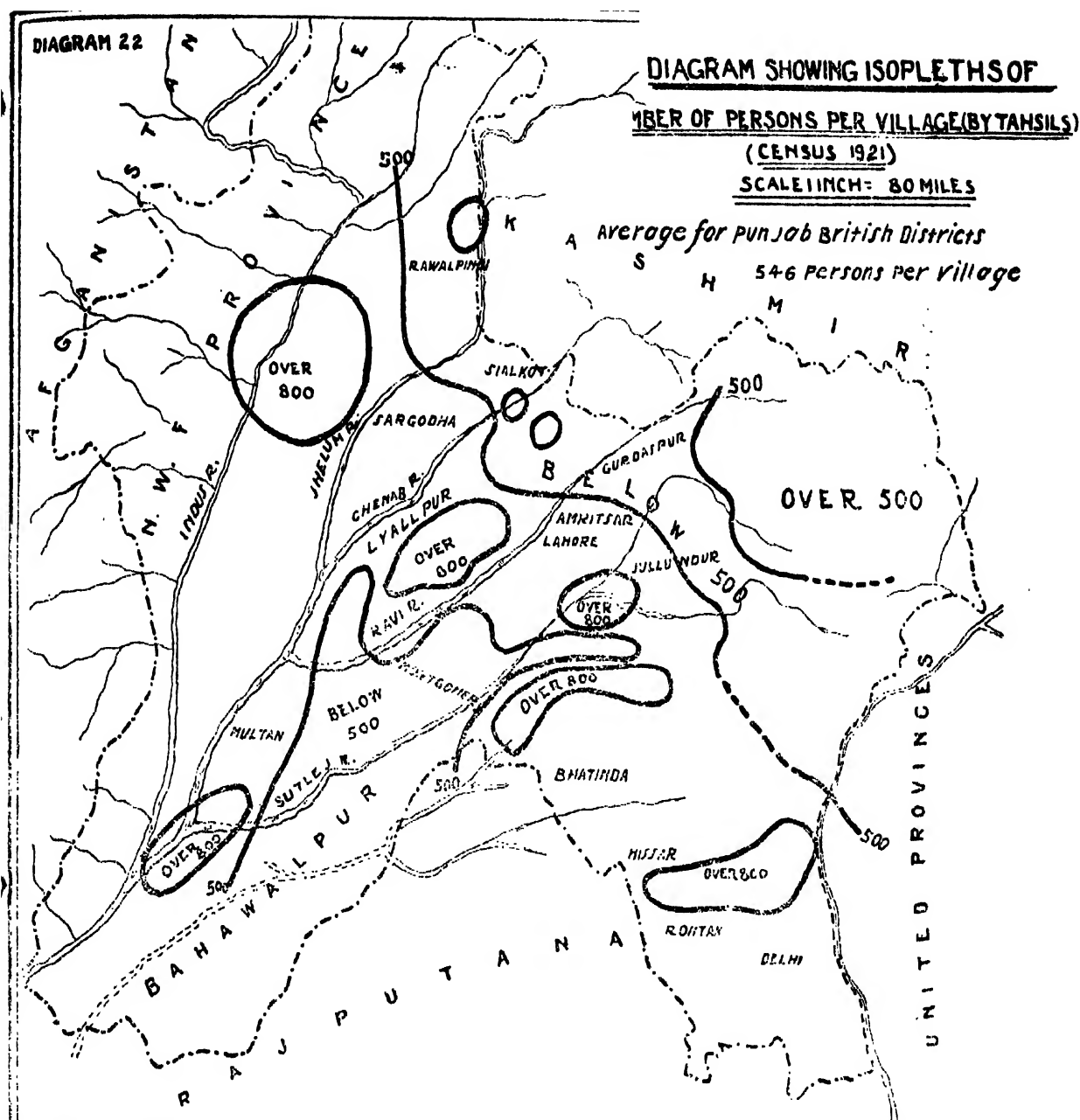
DIAGRAM 20

**DIAGRAM SHOWING ISOPLETHS
OF POPULATION DENSITY PER
SQUARE MILE 1921 CENSUS**

Scale 1" = 80 Miles



per village, this line being roughly concurrent with the isohyets of 25" of annual rainfall.



This line demarcates the submontane area of villages with a low population. The only other area with a small population per village is in the Lower Bari Doab Colony between Khanewal and Chunian. The villages in this area should tend to increase in size in future years, though the rate of their doing so will be restricted unless the peculiar deflocculated condition of the soil particles which renders the soil of large tracts in this colony * practically unculturable, can be remedied.

56. Closely associated with the population of each village is the area of land comprised within the revenue limits of each. The averages worked out for purposes of diagram 23 are based on the same tahsil areas as those used in section 6, namely, the area of a tahsil less the so-called revenue area of the towns within the tahsil. For details subsidiary Table X may be referred to. As was to be expected the correspondence between the average area of villages and the average population of tahsils, is by no means complete, the correlation being represented by the co-efficient 0.572, a relationship which is still further

*When dry the true 'barn' soil approaches the hardness of tile.

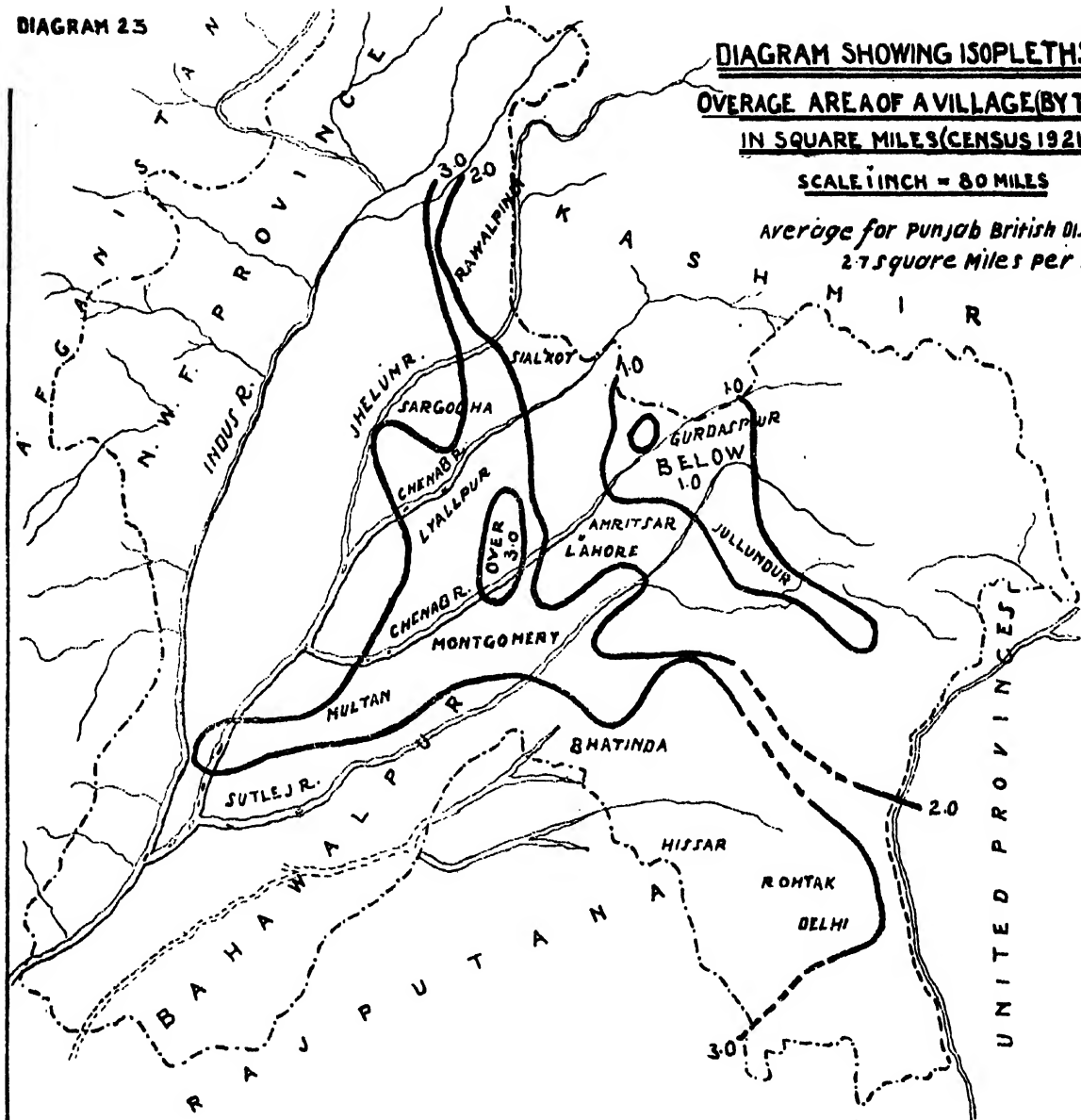
diminished when the effect of the number of persons per house has been eliminated. This point is discussed in paragraph 58.

DIAGRAM 25

**DIAGRAM SHOWING ISOPLETHS OF
OVERAGE AREA OF A VILLAGE (BY TAHSILS)
IN SQUARE MILES (CENSUS 1921)**

SCALE 1 INCH = 80 MILES

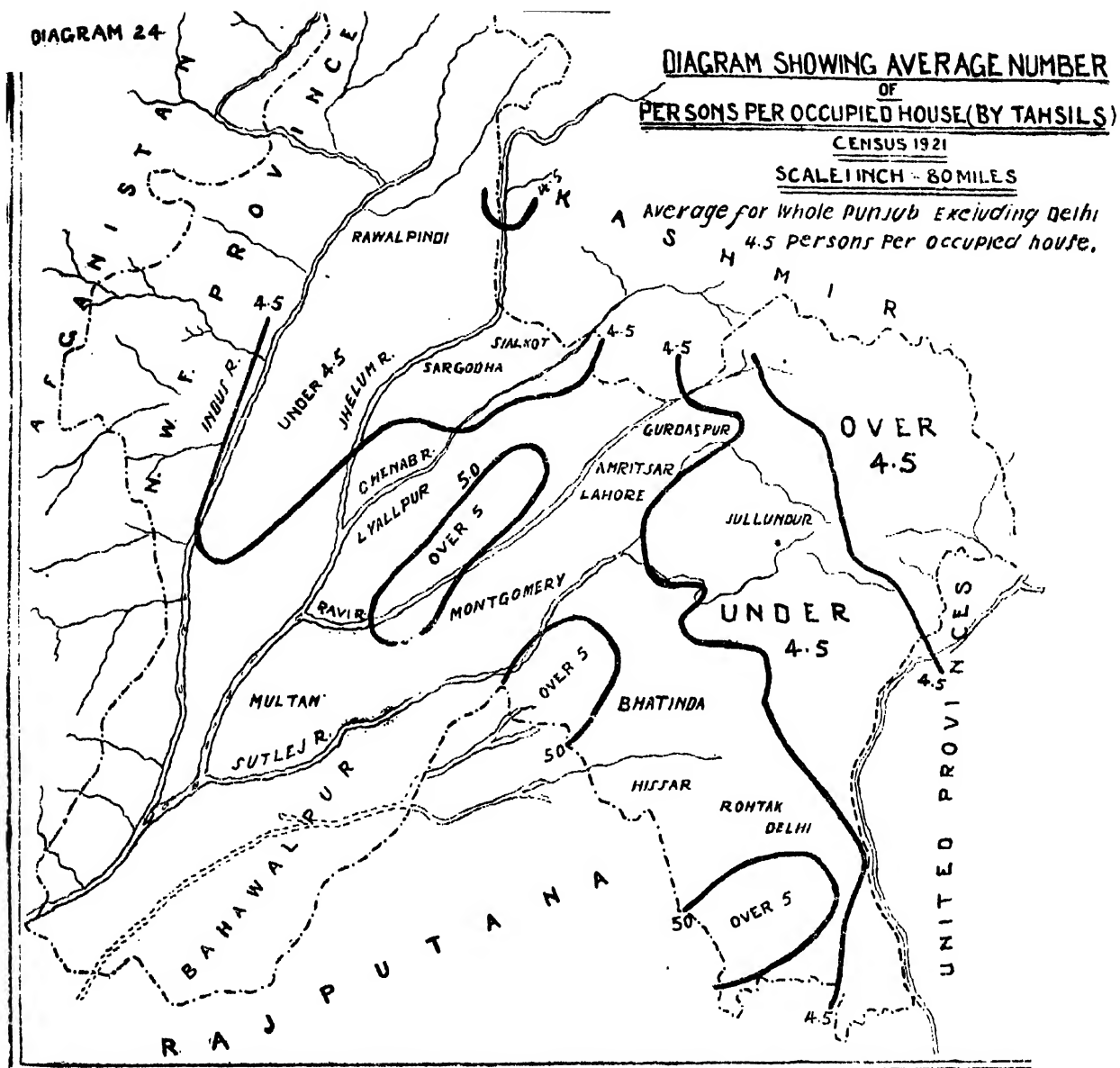
*Average for Punjab British Districts
2.7 square miles per village.*



Number of
persons per
occupied
house in vil-
lages.

57. While we have seen that the population density, the average size of villages in each tahsil and the average area of each village by tahsils have a variation in magnitude which is an obvious function of the population drift, of climatic conditions, and irrigational facilities, it is interesting to note a relative constancy represented by a co-efficient of variation of 8 per cent., in the habits of the rural population, and that is in respect of the average number of persons per occupied house. Diagram 24 shows the territorial variation of the number of persons per occupied house, the isopleths being again drawn from the tahsil figures which are reproduced in subsidiary Table XI. The average number of persons per occupied house for the whole of the Punjab, excluding Delhi, is 4.5 persons, and it will be observed that the number of persons per occupied house never rises above 5.7 for Samundri tahsil of the Lyallpur District, and never falls below 3.6, its value for the Chakwal tahsil of the Jhelum District. In the Punjab states the same constancy is noticeable, the only exception being Malerkotla, which has the remarkably small figure of 2.7 persons per occupied house. The explanation suggested to me by a high official familiar with the local conditions, is that the figure 2.7 represents the smallness of the families in Malerkotla, consequent on the inferior economic conditions of this tract. This explanation has no doubt considerable weight, but it hardly bridges the enormous

ap between the number of persons per house in Malerkotla and the rest of the Punjab.



As the point is of considerable interest from an economic point of view, a closer statistical analysis will be desirable.

Excluding Malerkotla, the observed frequencies of Tahsils or States in the Punjab, which have a given number of persons per occupied house, is as noted in the margin.

This frequency distribution gives the following values for the moments about the mean, the mean itself being at 4.546 persons per occupied house :—

$$\mu_2 = 0.1313$$

$$\mu_3 = 0.0165$$

$$\mu_1 = 0.0656$$

From which we obtain--

$$\beta_1 = 0.12 \pm 0.16$$

$$\beta_2 = 3.81 \pm 1.17$$

Thus both β_1 and $\beta_2 - 3$ differ from zero by less than their probable errors arising from random sampling, and therefore the distribution is of the Gaussian type. The appropriate curve to fit the data has the equation

$$Y = 14.423e^{\frac{-(X-4.540)^2}{2.026}}$$

referred to zero persons per house as origin.

Now if the social and economic conditions of Malerkotla are continuous with those of the Punjab generally in respect of the number of persons per house, we can calculate the probability that it forms a part of the aforesaid Gaussian distribution. Malerkotla has 2.7 persons per occupied house, and that differs from the mean by 5.07 times the standard deviation. As the area of the Gaussian curve to the left of this is 1.987×10^{-7} of the whole, the probability that out of 132 states and tahsils, one should have only 2.7 persons per occupied house is 2.63×10^{-5} or about 1 in 38,000. A dispassionate statistician, therefore, examining the figures from a distance, might justifiably lay odds of nearly 38,000 to 1 against Malerkotla being in the Punjab!

As Malerkotla is in the Punjab, and is very centrally situated at that, the only conclusions we can come to seem to be either,

- (1) that the economic and social life of Malerkotla are most abnormal, the explanation being probably that suggested by the official referred to above, or
- (2) that the enumeration of persons or houses, is incorrect, the inaccuracy vitiating the conclusion as to the 'normal' character of the general Punjab distribution, or, that there is a particularly large inaccuracy in the Malerkotla census.

As to alternative (2) the enumeration in Malerkotla gave 80,322 persons and 30,096 occupied houses, so that an error of 3,322 in the number of occupied houses, or of 9,996 in the number of persons would be required to bring the number of persons per occupied house to 3.0, which even then would form a very marked outlier from the general Punjab distribution. Both these are errors of over 10 per cent., and this is more than we ought to expect; but that there is some error of enumeration seems an unavoidable deduction from the argument, unless we invoke the aforesaid rare hazard of a 1 in 38,000 chance.

The average number of persons per house for the Punjab States is 4.5, exactly the figure for British Districts only.

58. For a full examination of the effect of the area of villages, and of the number of persons per occupied house, on the population, it would be necessary to take each village separately. This would entail an amount of labour disproportionate to the issue, until such time as Government ceases to require that Reports shall consist of soporific literature only.

Herein, therefore, only the correlations of these associated conditions have been calculated for tahsil averages only: and, further, to secure homogeneity, certain tahsils, which have special populations or areas, owing to their proximity to the frontiers of the Province, have been omitted. These tahsils are Kulu, Hamirpur, Khushab, Pindigheb, Talagang, Mianwali, Bhakhar, Isakhel, Sanawan, Leiah and the Biloch Trans-Frontier. This leaves 103 tahsils and Delhi Province, or 104 units in all, for comparison.

The following crude correlations result:—

Correlation of population and village..	..	= .572 ± .045
Correlation of population and number of persons per occupied house ..	..	= .337 ± .059
Correlation of area of village and number of persons per occupied house ..	..	= .282 ± .061

All these correlations are over 4 times their probable errors, and, were the matter to be left there, one might suppose that there was an association between the average area of villages and the average number of persons per occupied house.

The suggested dependence, however, would be erroneous, as further examination will show. For convenience the population of a village will be called 'P', its 'revenue' area 'A', and the number of persons per occupied house 'H'. The letters all denote tahsil averages. The full results are then as follows:—

	Mean.	Standard deviation.	Co-efficient of variation.
Population	580 persons	251.46	43.4 %
Area	2.5 sq. miles	1.474	59.0 %
Persons per house	4.5 persons	.381	8.5 %

The partial correlation co-efficients which represent the association of any two of the variables, when the effects of association with the third variable have been eliminated, are—

Population and area $\dots r_{A, P, H} = .528 \pm .048$

Population and number of persons per house $\dots r_{H, P, A} = .224 \pm .050$

Area of village and number of persons per house $\dots r_{A, H, P} = .115 \pm .065$

Thus, we see that $r_{A, H, P}$ is less than double its probable error, and there is no true association between the area of the village and the number of persons per occupied house.

The conclusions we may draw tentatively (subject always to the limitation imposed by averaging Tahsil figures) are that the villages with the larger area have the larger population, and that the villages with the larger population have the greater number of persons per house; but, we are definitely *not* entitled to conclude that the villages with the larger area have the greater number of persons per occupied house.*

We finally reach the following equations expressing the probable population average of the villages of a Tahsil in terms of the average area and the number of persons per house, with similar expressions for the average area, and for the persons per house—

$$P = 88.372A + 126.179H - 219.086$$

$$A = .003P + .388H + .986$$

$$H = .031A + .0004P + 1.183$$

If we call ΔP , ΔA , and ΔH the proportional departures of P , A and H relative to their standard deviations the above equations reduce to—

$$\Delta P = .518\Delta A + .192\Delta H$$

$$\Delta A = .682\Delta P + .100\Delta H$$

$$\Delta H = .132\Delta A + .261\Delta P$$

Thus the Tahsil average population of a village is increased 5 % for a 10 % increase of average area, but is increased less than 2 % for a 10 % increase in the number of persons per occupied house.

Similar results may be deduced for the effect of variations of population per village, and of persons per house, on the probable area of the village. From a sociological point of view, however, probably the last equation is the most important, as it shows that 10 % changes in the area of villages, or in the population, produce changes of only 1.3 and 2.6 % respectively in the number of persons per house. This result is consistent with the conclusion that the number of persons per house is practically uninfluenced by the changes in population, or by the changes in the average areas of villages from Tahsil to Tahsil.

59. Frequently as important as, sometimes even more important than the area of a village available for cultivation, is the position of the village site in that area, and the form of the boundary. The point to be considered is that a cultivator in order to plough his land has to reach it, and must, unless he builds a special cottage near his own fields—an exceptional occurrence in the Punjab—walk daily to and from his house to the fields, taking with him his plough and bullocks. His womenfolk, too, unless they are high caste Mohammedans, will have to travel an equal distance to bring the cultivator his midday meal.

The consequence is that in addition to the 15 miles of soil which the cultivator and bullocks have to cover in order to plough a single acre of land, there is added the double distance from the village site to the cultivator's fields. This is not a matter of which the mere consolidation of holdings, however, efficiently carried out can be a complete remedy. There is an irreducible minimum of distance which has to be travelled by the cultivator, independently of the proximity of his fields one to another, and this irreducible minimum I propose to call "the mean scalar distance." This mean scalar distance is thus a mathematical concept, a full expression for which, and the calculation of its values in certain theoretical and practical cases is considered in greater detail in Appendix 3 to this Report.

Clearly the most efficient boundary-shape of the village area, and the most efficient precincts of the village site will be those for which the mean scalar distance is a minimum. There are thus two possibilities.

Boundary
and village
site position
efficiency.

* The argument above merely gives quantitative precision to the syllogism 'some A is B, some B is C. Therefore some A is not necessarily C.'

Firstly, that the village boundary should be altered so as to make its shape approximate to its most efficient form.

Secondly, that the village site should be in a position in which the mean scalar distance is a minimum for the particular boundary.

Thus, in regard to shape it is clear that a circular boundary with the village site in the centre makes the mean scalar distance less than for any other boundary or position. As, however, it is impossible for all villages to have a circular boundary without leaving a lot of intervening waste-ground, the most efficient boundary for a number of villages of equal area is hexagonal. So long as villages have the same area there are only 3 possible regular figures which can represent their contours. These are the Hexagon, Square, and Equilateral Triangle, and the following results have been obtained for their mean scalar distances from their respective centres :—

Shape of boundary.	Mean Scalar Distance from centre of figure.
Circle	$\cdot 376126 \times \text{square root of area.}$
Hexagon	$\cdot 377197 \times \text{square root of area.}$
Square	$\cdot 382598 \times \text{square root of area.}$
Equilateral Triangle	$\cdot 403647 \times \text{square root of area.}$

If therefore we take a village of 2·7 square miles in area, which is the average size of a village in the Punjab, we find that the cultivator has to travel, on an average, $1\frac{1}{4}$ miles each working day in simply going to and from his fields. This is the most favourable case of a village with an hexagonal boundary, with the village site in the centre. All this distance may be regarded as wasted effort, and this fact, no doubt, has limited practically the size of Punjab villages.

As regards the position of the village site in relation to the boundary this is even more important, as entailing wasted time and labour in travelling to and from the fields, than is the shape of the boundary. For example, we have the following values for the mean scalar distance from the vertex of the triangle :—

Figure.	Mean Scalar Distance from the Vertex.
Equilateral Triangle	$\cdot 923940 \times \text{square root of area.}$
Isosceles right-angled triangle from the vertex containing the right angle	$\cdot 765196 \times \text{square root of area.}$
Isosceles Triangle from the vertex with an angle of 120°	$\cdot 699137 \times \text{square root of area.}$

These values show how enormously the mean scalar distance is increased as the village site departs from its central position.

The practical calculation of the scalar mean distance for some actual villages with irregular boundaries is given in Appendix 3. The concept will repay full mathematical examination.

60. A special building census was held in February 1921 in Lahore City, Lahore Civil Station, Amritsar City, Jullundur City and Rawalpindi City and the results obtained, which are exhibited in Subsidiary Table XII, might have been extremely valuable but for the fact that they appear to be vitiated by serious errors. Thus if we take columns 10—18 of Subsidiary Table XII for wards 1—6 of Lahore City and calculate from it the number of inhabitants in those wards on the assumption that the centroid of the frequency of group 1—5 inhabitants is at 2, that the centroid of the frequency of group 6—10 inhabitants is at 7 and so on, we find that the total number of inhabitants in wards 1—6 works out at 117,140 as against a census figure of only 92,533. This excess of nearly 25,000 persons cannot be explained by the difference in date of only one month between the building census and the census proper, and the only conclusion appears to be is that in the

Number of
Persons per
Building in
selected towns
and cities.

building census figures the recorded number of inhabitants per occupied building represents the total family whether some members of the family happened to be residing elsewhere or not. The same uncertainty does not attach to the figures for the number of persons per occupied house (with the exception of Malerkotla State) quoted in paragraph 8 above, and it is possible, therefore, that the greater number of persons per building in the towns somewhat exaggerates the relative congestion in towns as compared to villages.

For purposes of the building census the following definition was adopted :—

"Every building which is entirely separate from, or has no internal means of communication with, the adjoining buildings, constitutes a separate building, for the purposes of this schedule. Any building with one common entrance constitutes one building only, no matter how it is divided up internally. For instance a *serai* forms one building: a *haveli* built round a courtyard forms one building: but if a row of houses is all built adjoining each other, but have separate entrances from the street and no internal means of communication with one another, they form separate buildings."

The following figures of the number of inhabitants per inhabited building may now be noted :—

City and ward.							Inhabitants.	Inhabited houses.	Inhabitants per inhabited building.
Lahore City—									
Ward	1	..	..	..	..	..	11,924	3,171	3-760
"	2	..	..	..	..	..	21,136	6,058	3-538
"	3	..	..	..	..	..	18,238	3,112	5-860
"	4	..	..	..	..	..	11,672	2,590	4-507
"	5	..	..	..	..	..	20,115	1,905	10-575
"	6	..	..	..	..	..	9,118	1,615	5-646
Total							92,533	18,151	5-015
Civil Station	..	..	..	..	..	..	11,857	10,378	4-322
Rawalpindi City—									
Ward	1	..	..	..	..	..	6,158	800	7-697
"	2	..	..	..	..	..	1,192	203	7-350
"	3	..	..	..	..	..	1,065	35	30-429
"	4	..	..	..	..	..	1,752	358	4-891
"	5	..	..	..	..	..	3,768	564	6-681
"	9	..	..	..	..	..	5,979	983	6-082
"	10	..	..	..	..	..	1,720	327	5-260
Total							21,934	3,270	6-708

The figures for ward 3 of Rawalpindi City suffer from some serious inaccuracies of which the Rawalpindi Municipality has no explanation to offer, arising most probably from doubt as to the ward boundaries, a doubt which exists even in respect of Lahore, Capital City though it is.

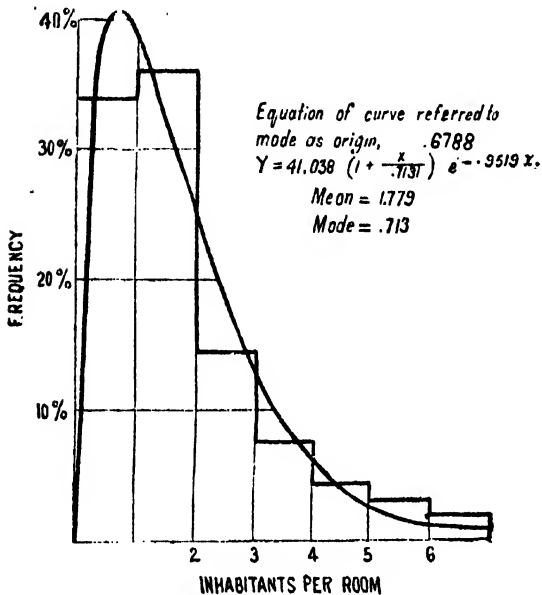
61. From the point of view of health, so far as this is affected by congestion, the number of inhabitants per room is even more important than the number of persons per inhabited building.* The required information is given in columns 26—30 of Subsidiary Table XII, which shows the frequency of the number of buildings, with the number of persons per inhabited room, between stated limits. For statistical purposes the limits adopted in the building census are not fine enough for accurate curve-fitting; but in the case of Amritsar City, for which the original schedules were available, I was able to get a slightly finer grouping at the beginning of the range. A frequency curve of type III has been fitted to the data of division 11 (the most congested division of Amritsar City), and to the whole of Amritsar City comprised in divisions 9, 10 and 11. The results are shown

*But in this connection it must be borne in mind that among the poorer classes, the number of persons per inhabited room is practically the same as the number of persons per inhabited building, so many of their houses consisting only of a single living room. That 5 or more persons should be able to sleep for 7 or 8 hours in a closed room (probably with their heads under their *resamis* as well) of perhaps only 2,000 cubic feet, whereas the allowance for health is usually put at 3,000 cubic feet per hour per person, is a matter which might well be investigated by a physiologist.

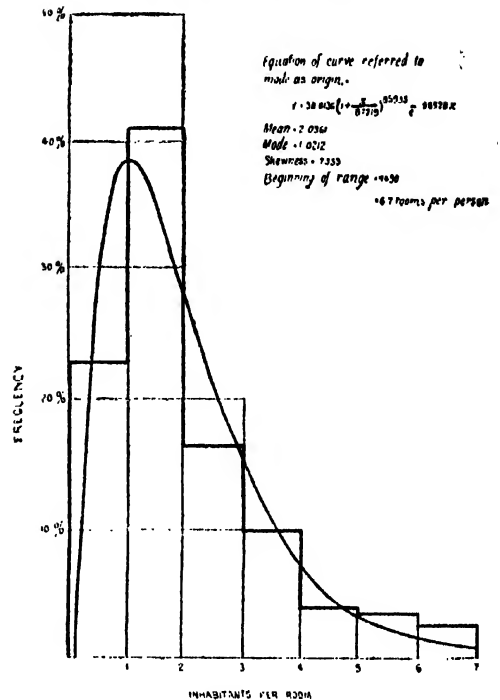
Number of
inhabitants
per room.

DIAGRAM

25. DISTRIBUTION OF FREQUENCY OF
INHABITANTS PER ROOM IN AMRITSAR CITY,
DIVISIONS 9, 10, AND 11, CENSUS 1921

Diagram
26.

DISTRIBUTION OF FREQUENCY OF
INHABITANTS PER ROOM IN AMRITSAR CITY
DIVISION 11, CENSUS 1921



graphically in diagrams 25 and 26. It should be noted that for the whole of Amritsar City the mean number of inhabitants per inhabited room is 1.779, while for division 11 it is 2.036 inhabitants. In division 11 again the modal, or the most commonly occurring case is to find 1.021 persons per inhabited room, while in the whole of Amritsar City the most commonly occurring case is that for .713 persons per inhabited room. Thus in the whole of Amritsar City the most usual condition is to find rather more than one room per person, while in congested division 11 the most frequent occurrence is to find just under one room per person. It is interesting to observe that in the case of division 11 the beginning of the range of the fitted curve is at .149, corresponding to 6.7 rooms per person, while in the case of the whole of Amritsar City the range begins at .0154 corresponding to 65 rooms per person. Whether in fact in Amritsar there is a plutocrat living solitarily in some vast mansion with this number of rooms, I am unable to say, but the conclusion is suggested by the above calculations, and it is not inconsistent with the largeness of Amritsar's population, and the known wealth of its Khatri traders.

Reference to
the Statistical
Tables.

62. It has not been possible to do more at this stage of the Census than attempt here and there descriptions, in as precise a mathematical form as may be, of the salient features of the distribution of the population in rooms, houses, villages, towns and cities. The broad outlines of such distributions have been described again and again, and it will serve no purpose to re-iterate the commonplaces as to the conditions of Punjab urban and rural life. The discussion of the inter-relationship of the various factors, which govern such distributions, is, no doubt, fascinating. But we must

(1) be sure of our facts, and

(2) express them in precise quantitative form

before attempting to examine the causal *nexus* which binds them. Disregard of these two important points has led to much premature, and, at times, valueless speculation. Keplerian description (*parvis componere magnis*) must precede Newtonian theory, and to attempt to reverse the order of discovery has led to vast waste of paper and print.

The following references will help those who wish to pursue at leisure particular lines of enquiry :—

Imperial Table I shows the population by sexes in urban and rural areas separately. It also shows the number of occupied houses in towns and villages for all the Punjab districts and states and for the Delhi Province. It is interesting to note that this table shows that the congestion of persons in houses in rural areas is greater than it is in the towns, as the average for the whole of the Punjab is 4·56 persons per house in the rural areas as against only 4·40 persons per house in Punjab towns. The data only refer to occupied houses.

Imperial Table III gives the towns and villages classified by population. The unit of grouping in this table is not uniform and this makes them difficult to manipulate from a statistical view-point. A classification with an equal base unit of 500 persons up to a range of 20,000 has already been given in para. 55 above. Imperial Table III will enable the classification to be continued above the range of 20,000 inhabitants per town or village.

Imperial Table IV gives the towns classified by population with variation since 1881, and may be referred to in connection with subsidiary tables 7 and 8 which have already been discussed in paragraph 52.

Imperial Table V shows the towns arranged territorially with population by religion, further analysis of which will be made in Chapter IV in considering the relative tendency of certain religious groups to congregate in towns.

Imperial Table VII, part (c), gives the details of age, sex and civil condition for cities and selected towns, a list of these being given in the margin.

Lahore City.	Jullundur Town.
Amritsar City.	Sialkot Town.
Multan City.	Ferozepore Town.
Rawalpindi Town.	Delhi City.
Ambala Town.	

Imperial Table VIII (C) gives details of literacy by religions and age for the same cities and selected towns as those mentioned above.

Imperial Table XI (B) gives the details of birth-place by districts for cities and selected towns.

Imperial Table XVII gives the details of occupation by districts, states and cities, as to which the reader may be referred to Chapter XII for further information.

I. Distribution of the population between towns and villages. II. Number *per mille* of the total population of each main religion who live in towns. III. Towns classified by population. IV. Cities and Selected Towns. V. Distribution of population in groups of places according to size, and in Rural Territory from 1891 to 1921. VI. Population of urban classes and of rural territory as constituted in 1921 with increase. VII. Population of places classed as Towns in each of the last five Censuses according to the Population classes in 1921. VIII. Increase (+) or decrease (-) in the Population of Towns in the inter-censal periods. IX. Rural Density of tahsils (British Territory only). X. Persons and area per village of tahsils (British Territory only). XI. Persons per house in tahsils of British Territory and States. XII. Results of Building Census.

SUBSIDIARY TABLE I.

Distribution of the population between towns and villages.

District or State and Natural Division.	AVERAGE POPULATION PER		NUMBER PER <i>mille</i> RESIDING IN		NUMBER PER <i>mille</i> OF THE URBAN POPULATION RESIDING IN TOWNS WITH A POPULATION OF				NUMBER PER <i>mille</i> OF THE RURAL POPULATION RESIDING IN VILLAGES WITH A POPULATION OF			
	Town.	Village.	Towns.	Villages.	20,000 and over.	10,000 to 20,000.	5,000 to 10,000.	under 5,000.	5,000 and over.	2,000 to 5,000.	500 to 2,000.	Under 500.
1	2	3	4	5	6	7	8	9	10	11	12	13
PUNJAB	13,961	498	103	397	563	160	208	69	23	153	544	280
I.—INDO-GANGETIC PLAIN WEST ..	16,776	553	136	864	612	179	160	49	20	161	565	254
1.—Hesar	21,588	760	106	891	633	267	..	..	40	206	599	155
2.—Loharu State	2,339	273	113	887	..	..	..	1,000	..	..	241	759
3.—Rohtak	10,765	965	98	902	335	316	319	..	33	287	574	106
4.—Dujana State	4,127	700	160	810	..	..	..	1,000	..	110	646	244
5.—Gurgaon	7,000	160	89	911	380	..	334	286	..	145	498	357
6.—Palauli State	3,342	369	185	815	..	..	..	1,000	..	145	486	309
7.—Karnal	16,244	538	98	902	618	330	..	52	65	183	484	268
8.—Jullundur	14,606	578	112	858	608	..	352	40	16	138	592	254
9.—Kapurthala State	11,926	402	126	871	..	772	228	..	..	123	467	410
10.—Ludhiana	25,997	570	137	863	665	227	108	..	..	119	628	253
11.—Malerkotla State	21,561	485	306	694	1,000	..	..	..	..	71	601	325
12.—Perozepore	21,524	655	106	894	468	331	128	73	11	158	615	216
13.—Paridkot State	13,183	711	175	825	..	1,000	..	..	..	109	706	185
14.—Patiala State	13,643	374	100	900	587	77	309	27	4	142	527	327
15.—Jind State	8,355	629	109	891	..	647	353	..	..	91	654	255
16.—Nabha State	6,862	453	156	844	..	358	484	158	..	67	554	379
17.—Lahore	50,121	665	310	690	892	59	39	10	24	226	566	184
18.—Amritsar	26,981	719	199	801	866	..	131	..	8	163	644	185
19.—Gujranwala	15,167	450	122	878	500	246	193	61	9	94	501	396
20.—Sheikhpura	1,204	559	21	976	..	..	..	1,000	65	143	540	252
II.—HIMALAYAN	7,071	320	33	967	486	..	323	191	92	234	381	298
21.—Nahan State	5,756	133	41	959	..	..	1,000	..	..	..	173	827
22.—Simla	10,273	70	680	320	892	..	..	108	..	..	39	961
23.—Simla Hill States .. ..	..	165	..	1,000	..	..	..	..	..	126	375	499
24.—Bilaspur State .. ..	..	103	..	1,000	..	..	..	..	..	43	109	848
25.—Kangra	4,904	1,068	6	994	..	..	..	1,000	164	305	432	98
26.—Mandi State	6,870	1,080	37	963	..	..	1,000	..	..	186	780	34
27.—Suket State	2,554	183	47	953	..	..	..	1,000	..	..	21	970
28.—Chamba State	5,668	2,724	46	960	..	..	1,000	..	214	619	104	3
III.—SUB-HIMALAYAN	13,075	422	92	908	592	75	254	79	6	112	490	392
29.—Ambala	14,803	329	174	826	645	97	193	65	..	80	382	538
30.—Kalsia State	1,046	280	141	859	..	..	1,000	..	..	96	329	575
31.—Hoshiarpur	11,617	421	38	962	611	..	389	..	6	98	519	377
32.—Gudaspur	6,873	352	73	927	422	..	263	315	..	78	428	494
33.—Sialkot	21,784	385	93	907	810	..	152	38	6	78	456	460
34.—Gujrat	11,505	512	56	944	477	235	288	..	..	122	587	291
35.—Jhelum	10,244	492	86	914	..	141	559	..	..	154	543	303
36.—Rawalpindi	52,217	397	183	817	968	..	..	32	..	115	475	410
37.—Attock	6,857	776	67	933	..	..	995	5	43	233	555	169
IV.—NORTH-WEST DRY AREA ..	10,088	591	73	927	369	215	303	113	24	154	605	217
38.—Montgomery	10,245	372	43	957	..	475	527	..	..	47	472	481
39.—Shahpur	7,214	653	110	890	..	564	223	213	21	221	554	204
40.—Mianwali	7,484	875	84	916	..	..	1,000	..	114	322	422	142
41.—Lyallpur	13,600	829	42	958	690	..	316	..	..	31	905	64
42.—Jhang	14,253	524	100	900	529	307	93	71	..	118	616	266
43.—Multan	32,394	482	109	891	873	..	127	..	14	130	581	275
44.—Bahawalpur State	8,592	732	44	956	..	538	240	222	21	247	572	160
45.—Muzaffargarh	4,804	641	42	958	..	..	577	423	19	204	595	182
46.—Dera Ghazi Khan	7,208	619	102	898	411	..	361	228	108	231	483	178
DELHI	3,04,420	585	624	376	1,000	..	..	..	35	117	571	277
I.—INDO-GANGETIC PLAIN WEST ..	304,420	585	624	376	1,000	..	..	..	35	117	571	277
1.—Delhi	3,04,420	585	624	376	1,000	..	..	..	35	117	571	277

SUBSIDIARY TABLE II.

Number per mille of the total population of each main religion who live in towns.

Natural Division.	NUMBER PER <i>mille</i> WHO LIVE IN TOWNS.							REMARKS.
	Population.	Hindu.	Musliman.	Christian.	Jain.	Sikh.	Parsee.	
PUNJAB	103	119	102	100	519	52	932	For details of the Natural Divisions see Subsidiary Table No. 1.
I.—Indo-Gangetic Plain West	136	137	175	161	100	51	950	
II.—Himalayan	33	25	175	850	124	135	1,000	
III.—Sub-Himalayan	92	120	80	183	801	59	892	
IV.—North-West Dry Area	73	195	53	77	676	50	860	
DELHI	624	535	809	660	822	966	1,000	
I.—Indo-Gangetic Plain West	624	535	809	660	822	966	1,000	

SUBSIDIARY TABLE III.

Towns classified by population.

Class of Towns.	Number of Towns.	Proportion to total urban population.	Number of females for 1,000 males.	INCREASE, PER CENT., IN THE POPULATION OF PLACES CLASSED AS TOWNS AT THE FORMER OF THE TWO CENSUSES IN EACH SUB-COLUMN.				INCREASE, PER CENT., IN THE URBAN POPULATION OF EACH CLASS FROM 1881-1921.	
				1911-1921.	1901-1911.	1891-1901.	1881-1891.	(a). In places classed as towns in 1881.	(b). In the total of each class in 1921, as compared with the corresponding total in 1881.
1	2	3	4	5	6	7	8	9	10
PUNJAB INCLUDING PUNJAB STATES	186	1	719	73	29	17	75	210	48
I.—1,00,000 and over	3	21	576	59	44	165	11	167	807
II.— 50,000—1,00,000	6	16	714	16	32	59	183	294	387
III.— 20,000— 50,000	19	19	734	92	30	6	93	166	319
IV.— 10,000— 20,000	30	16	753	128	78	34	63	123	48
V.— 5,000— 10,000	77	21	824	33	84	34	14	63	224
VI.—Under 5,000	51	67	781	12	28	16	66	106	534
DELHI	1	1	672	307	116	83	114	755	757
I.—1,00,000 and over	1	1	672	307	116	83	114	755	757

NOTE.—The table is of slight value owing to the changes of definition of the term 'town', and the variations in the number of towns in each class in the different censuses.

SUBSIDIARY TABLE IV.

Cities and Selected Towns.

City or Selected Town.	Population in 1921.	Number of persons per square mile.	Number of females to 1,000 males.	Population of foreign born per <i>mille</i> .	PERCENTAGE OF VARIATION				
					1911-1921.	1901-1911.	1891-1901.	1881-1891.	Total 1881-1921.
1	2	3	4	5	6	7	8	9	10
Lahore City	281,781	6,715	571	546	+23.2	+12.7	+14.8	+12.4	+79.1
Amritsar City	100,218	16,534	685	221	+4.9	+6.0	+18.8	+10.0	+5.5
Multan City	84,900	6,494	700	265	+14.5	+13.6	+17.2	+8.6	+23.5
Rawalpindi Town	101,142	11,902	441	637	+16.9	+14	+18.8	+39.3	+90.9
Ambala Town	70,326	4,540	667	449	+4.7	+1.9	+8	+17.5	+13.1
Jullundur Town	71,008	3,552	749	347	+2.4	+2.3	+2.3	+27.0	+36.2
Sialkot Town	70,619	5,934	721	355	+8.9	+11.9	+5.2	+20.4	+54.3
Ferozepore Town	54,351	4,941	663	522	+6.9	+3.0	+2.2	+27.5	+37.3
Delhi City	304,420	4,675	672	479	+30.7	+11.6	+8.3	+11.1	+75.6

SUBSIDIARY TABLE V.

Distribution of population in groups of places according to size, and in Rural Territory 1891 to 1921.

Class of place.	1921.		1911.		1901.		1891.		Per cent. of total population.			
	No. of places.	Population.	No. of places.	Population.	No. of places.	Population.	No. of places.	Population.	1921.	1911.	1901.	1891.
1	2	3	4	5	6	7	8	9	10	11	12	13
Total population of the Punjab ..	45,498	25,101,060	..	23,791,367	..	24,366,625	..	22,915,482	100·0	100·0	100·0	100·0
Urban Territory ..	186	2,596,678	173	2,334,445	224	2,580,798	220	2,444,183	10·3	9·8	10·6	10·7
I.—Towns of 10,000 and over ..	3	513,141	2	381,443	2	365,393	2	313,620	2·2	1·6	1·5	1·4
II.—Towns of 50,000 to 100,000 ..	6	108,990	6	450,880	6	432,956	7	455,233	1·6	1·9	1·8	2·0
III.—Towns of 20,000 to 50,000 ..	19	510,687	13	367,517	13	379,844	13	349,204	2·0	1·5	1·6	1·5
IV.—Towns of 10,000 to 20,000 ..	31	115,553	30	132,155	34	490,124	32	440,826	1·7	1·8	2·0	1·9
V.—Towns of 5,000 to 10,000 ..	76	539,279	77	539,892	99	679,439	97	658,667	2·1	2·3	2·8	2·9
VI.—Towns of under 5,000 ..	51	179,028	45	162,558	70	233,042	69	226,633	·7	·7	·9	1·0
Rural Territory ..	45,222	22,504,382	..	21,456,922	..	21,785,827	..	20,471,299	89·7	90·2	89·4	89·3
Total population of Delhi Province ..	315	188,188	..	113,447	..	405,409	..	372,766	100·0	100·0	100·0	100·0
Urban Territory ..	1	304,420	1	232,837	1	208,575	1	192,579	62·4	56·3	51·4	51·7
I.—Town of 100,000 and over ..	1	304,420	1	232,837	1	208,575	1	192,579	62·4	56·3	51·4	51·7
Rural Territory ..	314	183,768	..	180,610	..	196,834	..	180,187	37·6	43·7	48·6	48·3

SUBSIDIARY TABLE VI.

Population of Urban Classes and of rural territory as constituted in 1921 with increase.

CLASS OF PLACES.	Number of places in 1921.	POPULATION.		INCREASE 1911-1921.		REMARKS.
		1921.	1911.	Number.	Per cent.	
1	2	3	4	5	6	7
Punjab, including Punjab States	{ a b	15,384 24	24,977,915 123,145	23,791,367 ..	1,309,693 ..	5·5 ..
Territory Urban in 1921 ..	{ a b	162 24	*2,473,533 123,145	*2,334,445 ..	262,233 ..	11·2 ..
Towns having in 1921.	..	..	..	..	..	..
I.—100,000 and over ..	..	3	513,141	467,926	75,215	16·1
II.—50,000 to 100,000 ..	..	6	408,990	408,567	423	·1
III.—20,000 to 50,000 ..	..	19	510,687	449,534	61,153	13·6
IV.—10,000 to 20,000 ..	{ a b	28 2	391,157 24,396	347,001 ..	68,552 ..	19·8 ..
V.—5,000 to 10,000 ..	{ a b	68 9	485,140 54,139	457,419 ..	81,860 ..	17·9 ..
VI.—Under 5,000 ..	{ a b	38 13	134,418 44,610	155,115 ..	23,913 ..	15·4 ..
Territory Rural in 1921 ..	{ a b	45,222 24	†22,504,382 123,145	†21,456,922 ..	1,047,460 ..	4·9 ..
Delhi ..	..	315	488,188	413,447	74,741	18·0
Territory Urban in 1921 ..	..	1	304,420	232,837	71,583	30·7
Territory Rural in 1921 ..	..	314	183,768	180,610	3,158	1·7

Foot-note.—The towns entered against "b" were not treated as towns in 1911, and their population in that year cannot be obtained.

SUBSIDIARY TABLE VII.

Places classed as Towns in each of the last five Censuses, according to the population classes in 1921.

Serial No.	Town.				POPULATION.				
					1921	1911	1901	1891	1881
	1				2	3	4	5	6
CLASS I.—100,000 AND OVER.									
1	Lahore .. .. .	..	..	..	281,781	228,687	202,904	176,851	157,287
2	Amritsar .. .. .	..	..	..	160,218	152,756	162,429	136,766	151,896
3	Rawalpindi .. .. .	..	..	..	101,142	86,483	87,688	73,795	52,975
	TOTAL				543,141	467,926	453,081	387,415	362,158
CLASS II.—50,000 TO 100,000.									
4	Multan .. .. .	..	..	..	84,806	99,243	87,394	74,562	68,674
5	Ambala .. .. .	..	..	..	76,326	80,131	78,638	79,294	67,163
6	Jullundur .. .. .	..	..	..	71,008	69,318	67,735	66,202	52,119
7	Sialkot .. .. .	..	..	..	70,619	64,869	57,956	55,087	45,762
8	Ferozepore .. .. .	..	..	..	51,351	50,836	49,341	50,437	39,570
9	Ludhiana .. .. .	..	..	..	51,880	44,170	48,649	46,334	41,163
	TOTAL				408,990	408,587	389,713	371,916	317,751
CLASS III.—20,000 TO 50,000.									
10	Patiala .. .. .	..	..	..	47,531	46,974	53,545	55,856	53,629
11	Gujranwala .. .. .	..	..	..	37,887	30,307	30,092	27,678	23,661
12	Bhiwani .. .. .	..	..	..	33,270	31,100	35,917	35,487	33,762
13	Kasur .. .. .	..	..	..	31,018	24,783	22,022	20,290	17,336
14	Jhang Maghiana .. .. .	..	..	..	30,139	25,914	24,382	23,290	21,029
15	Simla .. .. .	..	..	..	27,494	19,405	14,505	13,836	13,258
16	Panipat .. .. .	..	..	..	27,313	26,342	26,914	27,547	25,022
17	Batala .. .. .	..	..	..	26,122	26,430	27,365	27,223	24,281
18	Rohatak .. .. .	..	..	..	25,240	20,301	20,323	16,702	15,699
19	Malerkotla .. .. .	..	..	..	24,564	23,880	21,122	21,754	20,621
20	Rewari .. .. .	..	..	..	23,129	24,780	27,296	27,034	23,972
21	Karnal .. .. .	..	..	..	22,845	21,961	23,559	21,963	23,133
22	Gujrat .. .. .	..	..	..	21,974	19,090	19,110	18,950	18,396
23	Hissar .. .. .	..	..	..	21,415	17,162	17,647	16,854	14,167
24	Hoshiarpur .. .. .	..	..	..	21,285	17,419	17,549	21,562	21,363
25	Dera Ghazi Khan .. .. .	..	..	..	20,731	18,466	23,731	27,880	22,309
26	Narnaul .. .. .	..	..	..	20,410	21,350	19,489	21,159	20,052
27	Bhatinda .. .. .	..	..	..	20,151	15,037	13,185	8,536	5,084
	TOTAL				482,551	430,791	438,052	433,597	397,374
CLASS IV.—10,000 TO 20,000.									
28	Wazirabad .. .. .	..	..	..	18,645	17,146	18,069	15,786	16,462
29	Bahawalpur .. .. .	..	..	..	18,491	18,114	18,516	18,716	13,435
30	Jhelum .. .. .	..	..	..	18,060	19,678	14,951	12,878	21,107
31	Jagraon .. .. .	..	..	..	17,731	15,039	18,799	18,116	16,873
32	Chiniot .. .. .	..	..	..	17,513	14,085	15,685	13,478	10,731
33	Bhera .. .. .	..	..	..	17,027	15,202	18,680	17,428	15,165
34	Kapurthala .. .. .	..	..	..	16,242	16,367	18,519	16,717	15,237
35	Sirsa .. .. .	..	..	..	16,241	14,629	15,800	16,415	12,292
36	Kaithal .. .. .	..	..	..	15,477	12,912	14,408	15,768	14,754
37	Hansi .. .. .	..	..	..	15,425	14,576	16,523	15,190	12,656
38	Nabha .. .. .	..	..	..	14,750	13,020	18,468	17,108	17,116
39	Montgomery .. .. .	..	..	..	14,601	8,129	6,602	5,159	3,178
40	Kotkapura .. .. .	..	..	..	14,063	10,644	9,519	7,730	6,196
41	Fazilka .. .. .	..	..	..	13,829	10,985	8,505	7,563	6,851
42	Sonepat .. .. .	..	..	..	12,981	12,014	12,990	12,611	13,977
43	Faridkot .. .. .	..	..	..	12,304	11,673	10,405	8,319	6,593
44	Basi .. .. .	..	..	..	11,560	11,125	13,738	13,810	12,896
45	Jagadhri .. .. .	..	..	..	11,544	12,045	13,462	13,029	12,300
46	Phagwara .. .. .	..	..	..	11,395	11,779	14,108	12,331	10,627
47	Shahabad .. .. .	..	..	..	11,329	11,054	11,009	11,473	10,218
48	Jind .. .. .	..	..	..	10,840	8,783	8,047	8,116	7,136
49	Jhajjar .. .. .	..	..	..	10,800	10,617	12,227	11,881	11,650
50	Sangrur .. .. .	..	..	..	10,799	9,041	11,852	8,820	9,139
51	Jalalpur Jattan .. .. .	..	..	..	10,792	11,615	10,640	11,065	12,839
52	Muktsar .. .. .	..	..	..	10,539	8,834	6,389	5,271	3,125
53	Patti .. .. .	..	..	..	10,439	7,987	8,187	7,495	6,407
54	Khushab .. .. .	..	..	..	10,009	10,150	11,403	9,832	8,989
	TOTAL				373,429	338,152	357,492	332,133	307,249

SUBSIDIARY TABLE VII.

Places classed as Towns in each of the last five Censuses according to the population classes in 1921.

Serial No.	Town.	POPULATION.				
		1921	1911	1901	1891	1881
1		2	3	4	5	6
CLASS V.—5,000 TO 10,000.						
55	Pind Dahan Khan	9,919	10,590	13,770	15,055	16,724
56	Campbellpur	9,850	4,022	3,036	2,556	1,467
57	Sumana	9,685	9,273	10,209	10,035	9,495
58	Nakodar	9,434	8,859	9,958	9,740	8,486
59	Pinli Gheb	9,419	9,045	8,452	8,462	8,583
60	Palwal	9,352	9,485	12,830	11,227	10,635
61	Mianwali	9,115	7,064	4,160	3,278	2,568
62	Abohar	8,916	9,192	5,596	2,056	1,823
63	Kamalia	8,916	8,237	6,976	7,490	7,594
64	Gurdaspur	8,906	6,248	5,764	5,857	4,706
65	Mohindargarh	8,580	9,761	9,084	10,847	10,398
66	Kartarpur	8,512	8,631	10,840	10,441	9,260
67	Leiah	8,476	8,173	7,546	7,437	5,899
68	Kalahagh	8,455	6,654	5,824	6,702	6,050
69	Hazro	8,408	9,950	9,799	7,580	6,533
70	Raikot	8,379	7,510	10,131	9,381	9,219
71	Urmar Tanda	8,362	7,016	10,247	11,632	10,295
72	Sunam	8,265	7,329	10,069	10,869	12,223
73	Ahmedpur Sharqi	8,255	9,472	9,928	9,844	9,853
74	Sultanpur	8,141	6,492	9,004	8,986	8,217
75	Jaitu	7,912	7,694	5,533	5,251	4,862
76	Barnala	7,714	5,341	6,905	6,612	5,449
77	Chunian	7,642	7,151	8,959	10,339	8,122
78	Sadhaura	7,630	7,771	9,812	10,445	10,794
79	Rupar	7,606	6,935	8,888	8,693	10,326
80	Jandiala	7,464	6,959	7,750	7,732	6,535
81	Beri	7,454	7,798	9,723	9,825	9,695
82	Chakwal	7,425	6,400	6,520	6,070	5,717
83	Pathankot	7,353	7,007	6,091	4,749	4,344
84	Jampur	7,317	6,517	5,028	5,815	4,697
85	Kunjah	7,240	7,090	6,431	5,474	5,799
86	Pakpattan	7,218	7,912	6,192	6,522	5,993
87	Peshawar	6,909	7,564	8,335	9,200	8,378
88	Dhanaula	6,886	6,091	7,443	7,095	7,264
89	Mandi	6,870	7,896	8,144	6,889	5,030
90	Nurmahal	6,845	7,178	8,706	8,520	8,161
91	Shujabad	6,730	6,334	5,880	6,329	6,458
92	Sahiwal	6,582	7,658	9,163	9,210	8,880
93	Dadri	6,582	5,713	7,009	7,604	7,837
94	Sanaur	6,532	6,307	8,580	8,678	9,128
95	Talagang	6,438	6,746	6,705	6,236	6,236
96	Harda Daska	6,283	6,046	6,655	3,070	5,525
97	Bhakkar	6,193	5,388	5,312	5,210	4,402
98	Isa Khel	6,172	6,868	7,630	7,600	6,692
99	Khem Karan	6,152	5,732	6,083	5,935	5,616
100	Dinga	6,014	5,351	5,412	5,424	5,015
101	Tarn Taran	5,988	4,260	4,428	3,900	3,210
102	Miani	5,965	5,819	7,220	7,149	8,069
103	Dharmkot	5,960	5,859	6,731	6,725	6,007
104	Bahadurgarh	5,955	4,990	5,974	6,103	6,874
105	Rahon	5,947	6,292	8,651	10,667	11,736
106	Hodal	5,854	5,468	8,142	9,601	6,453
107	Eminabad	5,816	5,526	6,494	5,841	5,880
108	Dajal	5,775	6,893	6,213	6,085	5,952
109	Nahan	5,756	6,341	6,256	6,121	5,253
110	Chamba	5,668	5,523	6,000	5,905	5,218
111	Majitha	5,664	5,223	6,403	6,417	6,053
112	Bhadaur	5,577	5,465	7,710	7,177	6,912
113	Muzaffargarh	5,386	4,387	4,018	3,642	2,720
114	Nawashahr	5,316	4,475	5,641	5,601	4,960
115	Hariana	5,205	5,395	6,005	7,066	6,472
116	Bawal	5,137	5,332	5,739	5,091	4,781
117	Gurguon	5,107	5,461	4,765	4,083	3,990
118	Gohana	5,107	5,438	6,567	7,690	7,444
119	Taunsa	5,103	5,965	5,200	4,413	4,123
120	Bangru	5,089	4,602	4,697	5,010	4,565
TOTAL		469,883	447,470	386,766	478,289	453,367

SUBSIDIARY TABLE VII.

Places classed as Towns in each of the last five Censuses according to the population classes in 1921.

Serial No.	Town.	POPULATION.				
		1921	1911	1901	1891	1881
1		2	3	4	5	6
CLASS VI.—UNDER 5,000						
121	Phul	4,913	4,515	4,961	5,188	4,192
122	Dharm sala	4,904	6,923	6,971	6,184	5,322
123	Sohna	4,758	5,138	6,021	5,990	7,374
124	Sujanpur	4,756	5,512	5,687	5,796	6,034
125	Phillaur	4,696	5,221	6,986	6,957	7,107
126	Ramnagar	4,632	5,256	7,121	6,592	6,830
127	Zira	4,622	4,378	4,001	4,356	3,492
128	Ferozepur Jhirka	4,542	5,719	7,278	6,848	6,878
129	Rojhan	4,363	9,621	8,177	8,063	5,998
130	Faridabad	4,337	4,487	5,310	5,929	7,427
131	Dera Baba Nanak	4,333	4,556	5,118	5,750	5,966
132	Thanesar	4,226	4,719	5,066	6,111	6,005
133	Khanpur	4,213	9,192	8,611	7,494	7,189
134	Chachrauli	4,202	4,216	5,520	5,674	5,389
135	Sharakpur	4,127	4,482	4,476	4,921	4,596
136	Sirhind	4,064	3,843	5,415	5,254	5,401
137	Dina Nagar	4,047	4,154	5,191	5,454	5,589
138	Rajanpur	3,964	3,701	3,917	4,973	4,932
139	Dera Bassi	3,890	4,236	4,641	4,966	4,907
140	Jalalabad	3,833	5,096	6,067	5,257	2,593
141	Ballabgarh	3,721	4,053	4,506	4,474	5,821
142	Burra	3,674	4,272	5,865	6,809	7,411
143	Karor	3,539	3,503	3,243	2,833	2,723
144	Alipur	3,434	3,312	2,788	2,552	2,555
145	Bakloh	3,430	3,566	3,012	2,503	1,479
146	Ahmedpur Lamma	3,405	4,223	5,343	4,203	4,235
147	Sambrail	3,324	6,285	7,169	7,058	6,921
148	Murree	3,292	1,705	1,844	1,768	2,489
148	Kasauli	3,212	3,191	2,192	1,977	2,897
150	Mithankot	3,204	2,589	3,487	3,624	3,353
151	Khangarh	3,184	3,349	3,621	3,505	3,417
152	Dalhousie	2,405	1,582	1,316	1,232	1,610
153	Loharu	2,339	2,343	2,175	2,431	2,038
154	Dagshai	1,745	2,032	2,159	2,569	3,642
155	Subathu	1,581	1,847	2,177	2,171	2,329
156	Sanawar	899	881	845	985	1,032
157	Attock	170	630	497	419	120
TOTAL		133,910	154,373	168,808	168,873	167,199
GRAND TOTAL I—VI		2,411,904	2,247,279	2,193,912	2,172,223	2,005,098
DELHI		304,420	232,837	208,575	192,579	173,393

Class of Population.	POPULATION.				
	1921	1911	1901	1891	1881
1	2	3	4	5	6
TOTAL POPULATION PUNJAB	25,101,060	23,791,367	24,366,625	22,915,482	20,798,896
Urban Population (as per statement annexed)	2,411,904	2,247,279	2,193,912	2,172,223	2,005,098
Rural Population	22,689,156	21,544,088	22,172,713	20,743,259	18,793,798
Percentage of Urban Population on total Population	9.61	9.45	9.00	9.48	9.64

SUBSIDIARY TABLE VIII.

Increase (+) or decrease (—) in the population of towns in the inter-censal periods.

Serial No.	Town.	1921.	1911.	1901.	1891.	Serial No.	Town.	1921.	1911.	1901.	1891.
1	2	3	4	5	6	1	2	3	4	5	6
CLASS I.—100,000 AND OVER.						CLASS V.—5,000 TO 10,000—concl.					
1	Lahore	+	+	+	+	78	Sadhaura	—	—	—	—
2	Amritsar	+	—	+	—	79	Rupar	+	—	+	—
3	Rawalpindi	+	—	+	+	80	Jandiala	+	—	+	+
CLASS II.—50,000 TO 100,000.						81	Beri	+	—	+	+
4	Multan	—	+	+	+	82	Chakwal	+	—	+	+
5	Ambala	—	+	—	+	83	Pathankot	+	+	+	+
6	Jullundur	+	+	+	+	84	Jamrup	+	+	+	+
7	Sialkot	+	+	+	+	85	Kunjah	+	+	+	—
8	Ferozepore	+	+	—	+	86	Pakpattan	—	+	—	+
9	Ludhiana	+	—	+	+	87	Peshawar	—	—	+	+
CLASS III.—20,000 TO 50,000.						88	Dhanaula	+	—	+	—
10	Patiala	+	—	—	+	89	Mandi	—	—	+	+
11	Gujranwala	+	+	+	+	90	Nurmahal	—	—	+	+
12	Bhiwani	+	+	+	+	91	Shujabad	+	+	—	—
13	Kasur	+	+	+	+	92	Sahiwal	—	—	—	+
14	Jhang-Maghiana	+	+	+	+	93	Dadri	+	—	—	—
15	Simla	+	+	+	+	94	Sanaur	+	—	—	—
16	Panipat	+	—	—	+	95	Talagang	—	+	+	0
17	Batala	—	—	—	+	96	Harid Daska	+	—	+	+
18	Rohatak	+	+	+	+	97	Bhakkar	+	+	+	+
19	Meerakotla	+	+	—	+	98	Isa Khel	—	—	+	+
20	Bewari	—	—	—	+	99	Khem Karan	+	—	+	+
21	Karnal	+	—	+	—	100	Dinga	+	—	+	+
22	Gujrat	+	—	+	—	101	Tarn Taran	+	—	+	+
23	Hissar	+	—	+	+	102	Miani	+	—	+	—
24	Hoshiarpur	+	—	—	+	103	Dharmkot	+	—	+	+
25	Dera Ghazi Khan	+	—	—	+	104	Bahadurgarh	+	—	—	—
26	Narnaul	—	+	—	+	105	Rahon	—	—	—	—
27	Bhatinda	+	+	+	+	106	Hodal	+	—	+	—
CLASS IV.—10,000 TO 20,000.						107	Eminabad	+	—	+	—
28	Wazirabad	+	—	+	—	108	Dajal	—	+	+	+
29	Bahawalpur	+	—	—	+	109	Nahan	—	+	+	+
30	Jhelum	—	+	+	—	110	Chamba	+	—	+	+
31	Jagraon	+	—	+	+	111	Majitha	+	—	—	+
32	Chiniot	+	—	+	+	112	Bhudaaur	+	—	+	+
33	Bhera	+	—	+	+	113	Muzaffargarh	+	+	+	+
34	Kapurthala	—	—	+	+	114	Nawashahr	+	—	+	+
35	Sirsa	—	—	—	+	115	Hariana	—	—	—	—
36	Kaithal	+	—	—	+	116	Bawal	—	—	+	+
37	Hansi	+	—	+	+	117	Gurgaon	—	+	+	+
38	Nabha	+	—	—	—	118	Gohana	—	—	+	+
39	Montgomery	+	+	+	+	119	Taunsa	—	+	+	+
40	Kotkapura	+	+	+	+	120	Banga	+	—	—	+
41	Fazilka	+	+	+	+	CLASS VI.—UNDER 5,000.					
42	Sonepat	+	—	+	—	121	Phul	+	—	—	+
43	Faridkot	+	+	+	+	122	Dharnasala	—	—	+	+
44	Basi	+	—	—	+	123	Sohna	—	—	—	—
45	Jagadhri	—	—	—	+	124	Sujanpur	—	—	—	—
46	Phagwara	—	—	+	+	125	Phillaur	—	—	+	—
47	Shahabad	+	+	—	+	126	Ramnagar	—	—	—	—
48	Jind	+	+	—	+	127	Zira	+	+	+	+
49	Jhajjar	+	—	+	+	128	Ferozepur-Jhirka	—	—	+	+
50	Sangrur	+	—	+	—	129	Rojhan	—	+	—	+
51	Jalandhar	—	+	—	—	130	Faridabad	—	—	—	—
52	Muktsar	—	+	+	+	131	Dera Baba Nanak	—	—	—	—
53	Patti	+	+	+	+	132	Thanesar	—	—	—	+
54	Khushab	—	—	+	+	133	Khanpur	—	+	+	+
CLASS V.—5,000 TO 10,000.						134	Chachrauli	—	—	+	+
55	Pind Dadan Khan	—	—	—	—	135	Sharakpur	—	+	—	+
56	Campbellpur	+	+	+	+	136	Sirhind	+	—	+	—
57	Sumana	—	—	—	—	137	Dina Nagar	—	—	—	—
58	Nakodar	+	—	+	+	138	Rajanpur	+	—	—	+
59	Pindi Gheb	+	+	—	—	139	Dera Bassi	—	—	+	+
60	Palwal	—	—	+	+	140	Jaleelabad	—	—	+	+
61	Mianwali	+	+	+	+	141	Ballabgarh	—	—	+	—
62	Abohar	—	+	+	+	142	Burra	—	—	—	—
63	Kanalia	+	+	—	—	143	Karor	+	+	+	+
64	Gurdaspur	+	+	—	+	144	Alipur	+	+	+	—
65	Mohindargarh	—	—	—	+	145	Bakloh	—	+	+	+
66	Kartarpur	—	—	—	+	146	Ahmedpur Lamma	—	—	+	+
67	Leiah	+	+	+	+	147	Sambrial	—	—	+	+
68	Kalabagh	+	+	—	+	148	Murree	+	—	+	—
69	Hazro	—	+	+	+	149	Kasauli	+	+	—	—
70	Raikot	+	—	+	+	150	Mithankot	+	—	—	+
71	Umar Tanda	+	—	—	+	151	Khangarh	—	—	+	—
72	Sunam	+	—	—	—	152	Dalhousie	+	+	+	—
73	Ahmedpur Sharqi	—	—	—	—	153	Loharu	—	+	—	+
74	Sultanpur	+	—	—	+	154	Dagshai	—	—	—	—
75	Jaitu	+	+	+	+	155	Subathu	—	—	+	—
76	Barnala	+	—	+	+	156	Sanawar	+	+	+	+
77	Chunian	+	—	—	+	157	Attock	—	+	+	+
						1	Delhi	+	+	+	+

Rural Density. Census 1921.

District.	Places classed as towns in each of the last five censuses.		Total area less revenue area of towns in column 3. (Square miles).	Population of tahsil.		Urban population.		Rural population.		Number of rural population per square mile of rural area.	
	Number.	Name.		1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
1	2	3	4	5	6	7	8	9	10	11	12
8. HOSHIA- PUR.	35	Hoshia- pur Tahsil	504	247,196	241,033	26,490	22,844	220,706	218,189	438	433
	36	Hoshia- pur	..	..	..	21,285	17,449	..	..	..	..
	37	Hoshia- pur Tahsil	500	215,600	208,865	5,205	5,395	..	..	..	..
	38	Hoshia- pur Tahsil	..	..	..	8,362	7,016	207,238	201,849	414	404
	39	Hoshia- pur Tahsil	..	..	..	8,362	7,016	..	..	..	..
	40	Hoshia- pur Tahsil	..	..	..	..	..	232,772	236,814	456	463
9. JULLUNDUR.	41	Jullundur Tahsil	360	289,396	278,101	79,520	77,949	209,876	200,152	583	556
	42	Jullundur	..	..	..	71,008	69,318	..	..	..	..
	43	Kartarpur	..	..	..	8,512	8,631	..	..	..	..
	44	Nawashahr Tahsil	284	177,692	170,738	16,352	15,369	161,340	155,369	568	547
	45	Rahon	..	..	..	5,917	6,292	..	..	..	..
	46	Banga	..	..	..	5,089	4,602	..	..	..	..
	47	Nawashahr	..	..	..	5,316	4,475	..	..	..	..
	48	Phillaur Tahsil	284	164,806	163,248	11,641	12,102	153,265	160,846	549	631
	49	Phillaur	..	..	..	4,696	5,224	..	..	..	..
	50	Nurmahal	..	..	..	6,845	7,178	..	..	..	..
10. LUDHI- ANA.	51	Nakodar Tahsil	356	190,650	189,833	9,434	8,859	181,216	180,974	509	508
	52	Nakodar	..	..	..	9,434	8,859	..	..	..	..
	53	Ludhiana Tahsil	674	285,953	258,367	51,880	44,170	234,073	214,197	347	318
	54	Ludhiana	..	..	..	51,880	44,170	..	..	..	..
	55	Jagraon Tahsil	385	164,553	146,659	26,110	22,549	138,443	124,110	360	322
11. FEROZEPUR.	56	Jagraon	..	..	..	17,731	15,039	..	..	..	..
	57	Raikot	..	..	..	8,379	7,510	..	..	..	..
	58	Samrala Tahsil	290	117,116	112,166	..	..	117,116	112,166	404	387
	59	Ferozepore Tahsil	664	221,737	204,285	54,351	50,836	167,386	153,449	252	231
	60	Ferozepore	..	..	..	54,351	50,836	..	..	..	..
	61	Zira Tahsil	480	166,373	155,695	10,582	10,237	155,791	145,458	325	303
	62	Zira	..	..	..	4,622	4,378	..	..	..	..
	63	Dharmkot	..	..	..	5,900	5,859	..	..	..	..
	64	Moga Tahsil	625	209,558	190,703	..	..	209,558	190,703	335	305
	65	Muktsar Tahsil	908	209,645	180,046	14,372	13,930	195,273	160,116	215	183
12. LAHORE.	66	Muktsar	..	..	..	10,539	8,834	..	..	..	..
	67	Jalalabad	..	..	..	3,833	5,096	..	..	..	..
	68	Fazilka Tahsil	1,319	290,935	228,028	22,715	20,477	268,190	208,451	203	158
	69	Fazilka	..	..	..	13,829	10,985	..	..	..	..
	70	Abohar	..	..	..	8,916	9,492	..	..	..	..
	71	Lahore Tahsil	620	515,613	437,579	281,781	228,687	233,832	208,892	377	337
13. AMRIT- SAR.	72	Lahore	..	..	..	281,781	228,687	..	..	..	..
	73	Chudian Tahsil	1,107	295,509	274,021	7,642	7,151	287,867	266,870	260	241
	74	Chudian	..	..	..	7,612	7,151	..	..	..	..
	75	Kasur Tahsil	785	320,214	289,255	47,609	38,502	272,605	250,753	347	319
	76	Kasur	..	..	..	31,018	24,783	..	..	..	..
	77	Khem Karan	..	..	..	6,152	5,732	..	..	..	..
14. GURDASPUR.	78	Patti	..	..	..	10,439	7,987	..	..	..	..
	79	Amritsar Tahsil	527	450,760	425,304	173,346	164,938	277,414	260,366	526	494
	80	Amritsar	..	..	..	160,218	152,750	..	..	..	..
	81	Majitha	..	..	..	5,664	5,223	..	..	..	..
	82	Jandiala	..	..	..	7,464	6,959	..	..	..	..
	83	Tarn Taran Tahsil	596	294,465	271,970	5,988	4,260	288,477	267,710	484	449
15. GURDASPUR.	84	Tarn Taran	..	..	..	5,988	4,260	..	..	..	..
	85	Ajvala Tahsil	417	184,149	183,522	..	..	184,149	183,522	442	440
	86	Gurdaspur Tahsil	494	234,146	224,515	12,953	10,402	221,193	214,113	448	433
	87	Gurdaspur	..	..	..	8,906	6,248	..	..	..	..
	88	Dina Nagar	..	..	..	4,047	4,154	..	..	..	..
	89	Batala Tahsil	467	275,695	269,706	30,455	30,986	245,240	238,720	625	511
	90	Batala	..	..	..	26,122	20,430	..	..	..	..
	91	Dera Baba Nanak	..	..	..	4,333	4,560	..	..	..	..
	92	Pathankot Tahsil	359	129,502	132,103	17,844	17,667	111,558	114,436	311	319
	93	Pathankot	..	..	..	7,353	7,007	..	..	..	..
94	Dalhousie	..	..	..	2,405	1,582	..	..	..	..
95	Bakloh	..	..	..	3,430	3,566	..	..	..	..
96	Sujanpur	..	..	..	4,756	5,512	..	..	..	..
97	Shakargarh Tahsil	486	212,849	210,447	..	..	212,849	210,447	438	433	

SUBSIDIARY TABLE IX.
Rural Density. Census 1921.

District.	Number.	Name.	Total area less revenue area of towns in column 3. (Square miles).	Population of tahsil.		Urban population.		Rural population.		Number of rural population per square mile of rural area.	
				1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
15. SIALKOT.	2	3	4	5	6	7	8	9	10	11	12
		Sialkot Tahsil ..	416	290,469	283,189	70,619	61,869	219,850	218,620	528	526
	73	Sialkot ..	..	..	..	70,619	61,869	..	..	..	..
		Pasrur Tahsil ..	282	110,788	148,758	6,909	7,561	133,879	141,197	175	591
	74	Pasrur ..	..	..	..	6,909	7,561	..	..	..	..
		Zafarwal Tahsil ..	307	158,936	156,930	..	..	158,936	156,930	518	511
		Raya Tahsil ..	481	196,936	194,207	..	..	196,936	194,207	107	101
16. GUJRANWALA.		Daska Tahsil ..	276	150,694	147,797	9,607	12,331	141,087	135,466	511	491
	75	Sambrial ..	..	..	..	3,321	6,283	..	..	..	..
	76	Harde Daska ..	..	..	..	6,283	6,016	..	..	..	..
17. SHEIKHUPURA.		Gujranwala Tahsil ..	926	291,567	266,656	43,703	35,833	250,864	230,823	271	219
	77	Gujranwala ..	..	..	..	37,887	30,307	..	..	..	..
	78	Eminabad ..	..	..	..	5,816	5,526	..	..	..	..
		Wazirabad Tahsil ..	440	146,218	118,998	23,277	22,462	122,941	126,536	279	288
	79	Wazirabad ..	..	..	..	18,645	17,146	..	..	..	..
	80	Ramnagar ..	..	..	..	4,632	5,256	..	..	..	..
18. GUJRAT.		Hadizabad Tahsil ..	908	182,766	189,928	..	..	182,766	189,928	201	209
		Khangah Dogran Tahsil ..	880	267,671	222,535	..	..	267,671	222,535	301	253
		Sharakpur Tahsil ..	1,022	255,461	213,928	4,127	4,182	251,334	209,746	246	205
19. SHAHPUR.	81	Sharakpur ..	..	..	..	4,127	4,182	..	..	..	..
		Gujrat Tahsil ..	557	295,551	304,778	10,006	37,795	255,545	266,983	459	479
	82	Gujrat ..	..	..	..	21,971	19,090	..	..	..	..
	83	Kunjah ..	..	..	..	7,246	7,090	..	..	..	..
	84	Jalalpur Jattan ..	..	..	..	10,792	11,615	..	..	..	..
		Kharian Tahsil ..	664	250,201	265,268	6,014	5,351	244,187	259,917	368	391
20. JHELMUM.	85	Dinga ..	..	..	..	6,011	5,351	..	..	..	..
		Phudia Tahsil ..	1,037	278,294	217,953	..	..	278,294	217,953	268	216
	86	Shahpur Tahsil ..	598	137,899	141,683	6,582	7,658	131,317	134,025	220	229
		Sahiwal ..	..	..	..	6,582	7,658	..	..	..	..
	87	Khushab Tahsil ..	2,519	168,718	175,824	10,009	10,159	158,709	165,665	63	66
		Khushab ..	..	..	..	10,009	10,159	..	..	..	..
21. RAWALPINDI.	88	Bhalwal Tahsil ..	816	220,951	184,726	22,992	21,021	197,959	163,705	243	201
		Bherra ..	..	..	..	17,027	15,202	..	..	..	..
	89	Miani ..	..	..	..	5,965	5,819	..	..	..	..
		Sargodha Tahsil ..	834	192,350	142,768	..	..	192,350	142,768	231	171
		Jhelum Tahsil ..	883	173,122	180,034	18,060	19,678	155,062	160,356	175	181
	90	Jhelum ..	..	..	..	18,060	19,678	..	..	..	..
22. ATTOCK.		Pind Dadan Khan Tahsil ..	848	143,338	156,305	9,919	10,590	133,419	145,715	157	172
	91	Pind Dadan Khan ..	..	..	..	9,919	10,590	..	..	..	..
		Chakwal Tahsil ..	997	160,608	175,236	7,425	6,400	153,183	168,836	154	169
	92	Chakwal ..	..	..	..	7,425	6,400	..	..	..	..
		Rawalpindi Tahsil ..	761	262,656	249,833	101,142	86,483	161,514	163,350	212	215
	93	Rawalpindi ..	..	..	..	101,142	86,483	..	..	..	..
23. MIANWALI.		Gujar Khan Tahsil ..	569	148,837	148,575	..	..	148,837	148,575	262	261
		Murree Tahsil ..	246	60,969	56,570	3,292	1,705	57,677	54,865	234	223
	94	Murree ..	..	..	..	3,292	1,705	..	..	..	..
		Kahuta Tahsil ..	453	96,762	92,849	..	..	96,762	92,849	214	205
		Attock Tahsil ..	646	173,472	161,351	18,428	14,602	155,044	146,749	240	227
	95	Hazro ..	..	..	..	8,408	9,950	..	..	..	..
24. KALABAGH.	96	Campbellpur ..	..	..	..	9,850	4,022	..	..	..	..
		Attock ..	..	..	..	170	630	..	..	..	..
	97	Pindi Gheb Tahsil ..	1,486	120,097	126,300	9,419	9,045	110,678	117,255	74	79
		Pindi Gheb ..	..	..	..	9,419	9,045	..	..	..	..
	98	Talagang Tahsil ..	1,187	108,501	115,418	6,438	6,746	102,063	108,672	86	92
		Talagang ..	..	..	..	6,438	6,746	..	..	..	..
25. KALABAGH.	99	Fatehjang Tahsil ..	863	110,179	116,204	..	..	110,179	116,204	128	135
		Mianwali Tahsil ..	1,525	147,553	138,380	9,115	7,064	138,438	131,316	91	86
	100	Mianwali ..	..	..	..	9,115	7,064	..	..	..	..
		Bhakkar Tahsil ..	3,122	147,121	135,127	6,193	5,388	140,928	129,739	45	42
	101	Bhakkar ..	..	..	..	6,193	5,388	..	..	..	..
		Isa Khel Tahsil ..	699	63,531	67,870	14,627	13,522	48,904	54,348	70	78
26. KALABAGH.	102	Isa Khel ..	..	..	..	6,172	6,868	..	..	..	..
	103	Kalabagh ..	..	..	..	8,455	6,654	..	..	..	..

SUBSIDIARY TABLE IX.

Rural Density. Census 1921.

District.	Number	Name.	Total area less revenue area of towns in column 3. (Square miles).	Population of tahsil.		Urban population.		Rural population.		Number of rural population per square mile of rural area.	
				1921.	1911.	1921.	1911.	1921.	1911.	1921.	1911.
1	2	3	4	5	6	7	8	9	10	11	12
24. MONTGOMERY.		Montgomery Tahsil ..	1,543	222,675	90,635	23,517	16,366	190,158	74,269	129	48
	101	Montgomery ..	..	..	..	14,601	8,129	..	..	..	..
	105	Kanalia ..	..	..	..	8,916	8,237	..	..	..	..
		Okara Tahsil ..	719	148,716	67,144	..	..	148,716	67,144	207	93
		Dipalpur Tahsil ..	995	200,978	197,310	..	..	200,978	197,310	202	198
	106	Pakpattan Tahsil ..	1,339	141,417	146,421	7,218	7,912	134,199	138,509	100	103
		Pakpattan ..	..	..	..	7,218	7,912	..	..	..	..
25. LYALLPUR.		Lyallpur Tahsil ..	949	344,852	310,916	..	..	344,852	310,916	363	328
		Samundri Tahsil ..	761	224,806	197,796	..	..	224,806	197,796	295	260
		Toba Tek Singh Tahsil ..	899	232,426	193,357	..	..	232,426	193,357	259	216
		Jaranwala Tahsil ..	708	177,379	145,793	..	..	177,379	145,793	251	206
26. JHANG.	107	Jhang Tahsil ..	1,350	232,570	216,628	30,139	25,914	202,431	190,714	150	141
		Jhang-Magbiana ..	..	..	..	30,139	25,914	..	..	..	..
	108	Chiniot Tahsil ..	1,007	211,188	183,906	17,513	14,085	193,675	169,881	192	169
		Chiniot ..	..	..	..	17,513	14,085	..	..	..	..
		Sherkot Tahsil ..	1,005	126,801	124,209	..	..	126,801	124,209	126	124
27. MULTAN.	109	Multan Tahsil ..	832	243,385	260,397	84,806	99,243	158,579	161,154	191	194
		Multan ..	..	..	..	84,806	99,243	..	..	..	..
		Shujabad Tahsil ..	681	132,091	134,418	6,730	6,331	125,361	128,084	184	188
	110	Shujabad ..	..	..	..	6,730	6,331	..	..	..	..
		Lodhran Tahsil ..	1,056	125,353	127,776	..	..	125,353	127,776	119	121
		Mailsi Tahsil ..	1,430	113,927	120,549	..	..	113,927	120,549	80	84
		Khanewal Tahsil ..	892	127,131	26,392	..	..	127,131	26,392	143	30
		Kabirwala Tahsil ..	861	148,377	144,681	..	..	148,377	144,681	172	168
28. MUZAFFARGARH.	111	Muzaffargarh Tahsil ..	911	178,579	187,064	8,570	7,736	170,009	179,328	187	197
		Muzaffargarh ..	..	..	..	5,386	4,387	..	..	..	..
	112	Khangarh ..	..	..	..	3,184	3,349	..	..	..	..
		Alipur Tahsil ..	925	116,711	146,135	3,431	3,312	143,277	142,823	155	154
	113	Alipur ..	..	..	..	3,431	3,312	..	..	..	..
		Sanawan Tahsil ..	1,321	108,970	107,671	..	..	108,970	107,671	82	82
29. DERA GHAZI KHAN.	114	Leiah Tahsil ..	2,413	131,218	128,591	12,015	11,676	122,203	116,915	51	48
		Leiah ..	..	..	..	8,476	8,173	..	..	..	..
	115	Kator ..	..	..	..	3,539	3,503	..	..	..	..
		Dera Ghazi Khan Tahsil ..	1,506	193,789	182,894	20,731	18,466	173,058	164,428	115	109
	116	Dera Ghazi Khan ..	..	..	..	20,731	18,466	..	..	..	..
		Sanghar Tahsil ..	1,049	84,759	106,640	5,103	5,965	79,656	100,675	76	96
30. DELHI.	117	Tanuas ..	..	..	..	5,103	5,965	..	..	..	..
		Rajanpur Tahsil ..	1,930	105,008	106,911	11,531	15,917	93,477	90,194	48	47
	118	Rajanpur ..	..	..	..	3,961	3,704	..	..	..	..
	119	Mithankot ..	..	..	..	3,204	2,589	..	..	..	..
	120	Rojhan ..	..	..	..	4,363	9,624	..	..	..	..
		Jampur Tahsil ..	827	85,496	103,415	13,092	13,410	72,404	90,605	88	109
	121	Jampur ..	..	..	..	7,317	6,517	..	..	..	..
	122	Dajal ..	..	..	..	5,775	6,893	..	..	..	..
		Biloch Trans-Frontier ..	2,566	26,758	28,587	..	..	26,758	28,587	10	11
		Delhi Tahsil ..	510	488,188	413,447	304,420	232,837	183,768	180,610	360	354
	1	Delhi ..	..	..	..	304,420	232,837	..	..	..	..

SUBSIDIARY TABLE X.

Statement showing average population and area per Village in Tahsil, Census 1921.

District.	Tahsil.	Number of villages.	RURAL.		AVERAGE.		District.	Tahsil.	Number of villages.	RURAL.		AVERAGE.	
			Population.	Area (in square miles).	Number of persons per village.	Area per village (in square miles).				Population.	Area (in square miles).	Number of persons per village.	Area per village (in square miles).
1	2	3	4	5	6	7	1	2	3	4	5	6	7
PUNJAB (BRITISH TERRITORY) .. 34,119 18,640,842 90,757 546 2.7							Sialkot	642	210,850	416	342	0.6	
HISSAR.	Hissar	135	114,857	798	851	5.9	Pasrur	376	133,879	282	356	0.7	
	Hansi	131	161,618	774	1,234	5.9	Zafarwal	483	158,936	307	329	0.6	
	Bhiwani	130	92,745	739	713	5.7	Raya	452	196,936	484	436	1.1	
	Fatehabad	259	195,801	1,177	756	4.5	Daska	256	141,087	276	551	1.1	
	Sirsa	306	165,438	1,636	511	5.3	Gujranwala	564	250,864	926	415	1.6	
ROH-TAK.	Rohtak	125	175,699	505	1,406	4.6	Wazirabad	252	122,971	440	488	1.7	
	Jhajjar	251	189,657	700	747	2.8	Infizabad	400	182,766	908	457	2.3	
	Gohana	117	170,184	512	1,455	4.6	Khongah Dogran	253	267,674	880	1,058	3.5	
	Sonepat	226	169,195	441	749	2.0	Sharakpur	660	251,334	1,022	381	1.5	
GURGAON.	Gurgaon	211	102,115	395	181	1.9	Gujrat	508	255,545	557	503	1.1	
	Ferozepur-Jhirka	230	93,743	304	108	1.3	Kharian	508	244,187	664	481	1.3	
	Nuh	260	112,119	401	431	1.5	Phalia	420	278,291	1,037	663	2.5	
	Palwal	187	116,551	356	623	1.9	Shahpur	251	131,317	598	523	2.4	
	Rowari	288	124,127	416	431	1.1	Khushab	171	158,709	2,519	928	14.7	
KAR-NAL.	Ballabgarh	173	72,545	280	419	1.6	Bhalwal	276	197,959	816	717	3.0	
	Karnal	386	209,762	840	543	2.2	Sargodha	283	192,350	834	680	2.9	
	Panipat	173	146,453	415	847	2.6							
	Knithal	412	260,245	1,216	632	3.0	Jhelum	431	155,062	885	360	2.1	
	Thanesar	419	131,046	540	313	1.3	Pind Dadan Khan	209	133,419	848	638	4.1	
AMBALA.	Ambala	291	111,600	352	381	1.3	Chakwal	247	153,183	997	620	4.0	
	Kharar	370	138,783	372	375	1.0							
	Jagadhri	373	111,586	403	299	1.1	Rawalpindi	418	161,511	761	361	1.7	
	Naraingarh	318	100,168	436	315	1.4	Gujar Khan	379	148,837	569	303	1.5	
	Rupur	360	108,519	286	302	0.8	Murree	104	57,677	216	555	2.4	
SIMLA.	Simla	95	4,183	42	41	0.4	Kahuta	239	96,762	453	405	1.9	
	Kot Khai	111	10,321	32	93	0.3	Attock	195	155,044	646	795	3.3	
							Pindi Gheb	131	110,678	1,486	826	11.1	
							Tidagang	87	102,063	1,187	1,173	13.6	
							Fatchjang	200	110,170	863	551	4.3	
KANGRA.	Kangra	133	113,470	417	853	3.1							
	Dehra	145	124,038	495	860	3.4	Mianwali	113	138,438	1,525	1,225	13.5	
	Nurpur	191	95,470	519	500	2.7	Bhakkar	203	140,928	3,122	694	15.4	
	Hamirpur	61	168,504	599	2,633	9.2	Isa Khel	59	48,904	699	829	11.8	
	Palampur	113	137,052	523	1,213	4.6							
HOSHIA-PUR.	Kulu	67	122,027	1,335	1,821	19.9	Montgomery	595	199,158	1,513	335	2.6	
	Hoshiarpur	485	220,706	504	455	1.0	Okara	347	148,716	719	429	2.1	
	Dasuya	632	207,238	500	328	0.8	Dipalpur	473	200,978	995	125	2.1	
	Garshankar	477	232,772	511	488	1.1	Pakpattan	420	134,199	1,339	320	3.2	
	Una	524	231,851	690	442	1.3							
JULLUN-DUR.	Jullundur	405	209,876	360	518	0.9	Lyalpur	322	344,852	949	1,071	2.9	
	Nawashahr	276	161,340	284	585	1.0	Samundri	287	224,806	761	783	2.7	
	Phillaur	221	163,265	284	694	1.3	Toba Tek Singh	320	232,426	899	726	2.8	
	Nakodar	319	181,216	356	568	1.1	Jaranwala	203	177,379	708	874	3.5	
LUDHIANA.	Ludhiana	432	234,073	674	542	1.6	Jhang	428	202,431	1,350	473	3.2	
	Jagraon	167	138,443	385	829	2.3	Chiniot	352	193,675	1,007	560	2.9	
	Samrala	260	117,116	290	450	1.1	Shorkot	200	126,861	1,005	634	5.0	
PEROZEPOR.	Ferozepore	361	167,386	664	464	1.8	Multan	282	158,579	832	562	3.0	
	Zira	338	165,791	480	461	1.8	Shujabad	146	125,301	681	859	4.7	
	Moga	166	209,558	625	1,262	3.8	Lodhran	201	125,353	1,056	480	4.0	
	Muktsar	319	195,273	908	612	2.8	Mailsi	335	113,927	1,430	340	4.3	
	Fazilka	315	268,190	1,319	851	4.3	Khaneval	301	127,131	892	324	2.6	
LAHORE.	Lahore	321	233,832	620	728	1.9	Kabirwala	262	148,377	861	566	3.3	
	Ohunian	467	287,807	1,107	610	2.4							
	Kasur	335	272,605	785	814	2.3	Muzaffargarh	376	170,009	911	452	2.4	
							Alipur	173	143,277	925	828	5.3	
							Sanawan	143	208,970	1,321	762	9.2	
AMRITSAR.	Amritsar	368	277,414	527	754	1.4	Leiah	158	122,203	2,413	773	16.3	
	Tarn Taran	340	288,477	596	848	1.8							
	Ajnala	328	184,149	417	661	1.3	Dera Ghazi Khan	235	173,058	1,506	736	6.4	
							Sanghar	171	79,656	1,049	466	6.1	
							Rajanpur	165	93,477	1,930	567	11.7	
GURDAS-PUR.	Gurdaspur	661	221,193	494	335	0.3	Jampur	141	72,404	827	514	5.9	
	Batala	480	245,240	467	511	1.0	Biloch Trans-Frontier	8	26,758	2,566	3,345	320.7	
	Pathankot	400	111,558	359	279	0.8							
	Shakargarh	702	312,849	486	303	0.3							
							Delhi	814	183,768	510	585	1.6	

SUBSIDIARY TABLE XI.

Statement showing average number of persons per house (in Tahsil or State). Census 1921.

District.	TAHSIL.			Number of occupied houses.	Population.	Average number of persons per house.	District.	TAHSIL.			Number of occupied houses.	Population.	Average number of persons per house.	
	Number.	Name.						Number.	Name.					
1	2	3		4	5	6	1	2	3		4	5	6	
1. HISSAR.		PUNJAB		5,532,305	25,101,060	4.5	13. ANRIT. SAR.	52	Amritsar ..		101,443	450,760	4.4	
		BRITISH TERRITORY		4,550,537	20,685,024	4.5		53	Tarn Taran ..		64,780	294,465	4.5	
	1	Hissar ..		28,433	136,272	4.8		54	Ajnala ..		39,323	184,149	4.7	
	2	Hansi ..		37,345	177,043	4.7								
	3	Bhiwani ..		25,312	126,015	5.0								
	4	Fatehabad ..		39,854	195,801	4.9								
	5	Sirsa ..		38,514	181,679	4.7								
	6	Rohtak ..		34,266	200,939	5.1		55	Gurdaspur ..		49,998	234,146	4.7	
	7	Jhajjar ..		43,192	213,866	5.0		56	Batala ..		57,747	275,695	4.8	
	8	Gohana ..		36,759	175,291	4.8		57	Pathankot ..		29,608	129,502	4.4	
	9	Sonepat ..		39,171	182,176	4.7		58	Shakargarh ..		45,605	212,849	4.7	
	10	Gurgaon ..		21,620	111,980	4.5		59	Sialkot ..		59,233	290,469	4.9	
	11	Ferozepur-Jhirka		23,003	98,285	4.3		60	Pasrur ..		29,659	140,788	4.7	
	12	Nuh ..		25,634	112,119	4.4		61	Zafarwal ..		33,899	158,936	4.7	
	13	Palwal ..		30,765	131,790	4.3		62	Raya ..		41,131	196,936	4.8	
	14	Rewari ..		32,035	147,256	4.6		63	Daska ..		31,491	150,694	4.8	
	15	Ballabgarh ..		19,120	80,603	4.2								
	16	Karnal ..		54,256	232,607	4.3		64	Gujranwala ..		65,834	294,567	4.6	
	17	Panipat ..		39,587	173,796	4.4		65	Wazirabad ..		32,261	146,248	4.6	
18	Kaithal ..		61,078	275,722	4.5	66	Hafizabad ..		39,498	182,766	4.6			
19	Thanesar ..		35,167	146,601	4.2									
2. ROH. TAK.	20	Ambala ..		47,033	187,920	4.0	14. GURDAS- PUR.	67	Khangah Dogran ..		51,715	267,074	5.2	
	21	Kharar ..		34,897	142,894	4.1		68	Sharakpur ..		53,263	255,461	4.8	
	22	Jagadhri ..		31,150	126,704	4.1								
	23	Naraingarh ..		26,120	107,798	4.1								
	24	Rupar ..		28,387	116,155	4.1								
	25	Simla ..		8,505	35,003	4.1		15. SIALKOT.	69	Gujrat ..		67,417	295,551	4.4
	26	Kot Khai ..		2,141	10,324	4.2			70	Khurian ..		60,819	250,201	4.1
	27	Kangra ..		20,923	118,374	4.4			71	Phalia ..		62,901	278,294	4.4
28	Dehra ..		29,827	124,638	4.2									
29	Narpur ..		21,401	95,470	4.5	16. GUJRAN- WALA.	72		Shahpur ..		33,546	137,899	4.1	
30	Hanuipur ..		38,912	158,504	4.3		73		Khushab ..		41,263	168,718	4.1	
31	Palampur ..		31,033	137,052	4.4		74		Bhawal ..		49,171	220,951	4.6	
32	Kulu ..		26,297	122,027	4.6		75		Sargodha ..		36,578	192,350	5.3	
33	Hoshiarpur ..		59,437	247,196	4.2		17. SHEIKH- HUPURA.	76	Jhelum ..		43,667	173,122	4.0	
34	Dastuya ..		50,924	215,600	4.2			77	Pind Dadan Khan ..		38,514	143,338	3.7	
35	Garhshankar ..		58,808	232,772	4.0			78	Chakwal ..		44,754	160,608	3.6	
36	Una ..		56,891	231,851	4.1									
37	Jullundur ..		66,681	289,396	4.3	18. GURJAT.		79	Rawalpindi ..		61,921	262,656	4.2	
38	Nawashahr ..		42,129	177,692	4.2			80	Gujar Khan ..		38,520	148,837	3.9	
39	Phillaur ..		36,415	164,806	4.5			81	Murree ..		13,094	60,969	4.7	
40	Nakodar ..		42,919	190,650	4.4			82	Kabuta ..		23,344	96,782	4.1	
41	Ludhiana ..		66,212	285,953	4.3		19. SHAH- PUR.	83	Attock ..		39,970	173,472	4.3	
42	Jagraon ..		36,943	164,553	4.5			84	Pindigheb ..		30,404	120,097	4.0	
43	Samrala ..		27,760	117,116	4.2			85	Talagang ..		27,931	108,501	3.9	
44	Ferozepore ..		49,325	221,737	4.5			86	Fatchjang ..		27,742	110,179	4.0	
45	Zira ..		30,528	160,373	4.6	20. JHELM.		87	Mianwali ..		33,659	147,553	4.4	
46	Moga ..		46,113	209,558	4.5			88	Bhakkar ..		33,199	147,121	4.4	
47	Muktsar ..		42,134	209,645	5.0			89	Isa Khel ..		14,237	63,531	4.5	
48	Fazilka ..		53,686	290,935	5.4									
49	Lahore ..		109,214	515,613	4.7		21. RAWAL- PINDI.	90	Montgomery ..		45,094	222,675	4.9	
50	Chunian ..		62,915	295,509	4.7			91	Okara ..		30,740	148,716	4.8	
51	Kasur ..		69,721	320,214	4.6			92	Dipalpur ..		40,691	200,978	4.9	
								93	Pakpattan ..		28,586	141,417	4.8	
						22. ATTOCK.								
3. GURGAON.	10	Gurgaon ..		21,620	111,980	4.5	23. MIAN- WALI.							
	11	Ferozepur-Jhirka		23,003	98,285	4.3								
	12	Nuh ..		25,634	112,119	4.4								
	13	Palwal ..		30,765	131,790	4.3								
	14	Rewari ..		32,035	147,256	4.6								
	15	Ballabgarh ..		19,120	80,603	4.2								
	16	Karnal ..		54,256	232,607	4.3								
	17	Panipat ..		39,587	173,796	4.4								
4. KAR. NAL.	18	Kaithal ..		61,078	275,722	4.5	24. MONT- GOMERY.							
	19	Thanesar ..		35,167	146,601	4.2								
	20	Ambala ..		47,033	187,920	4.0								
	21	Kharar ..		34,897	142,894	4.1								
	22	Jagadhri ..		31,150	126,704	4.1								
	23	Naraingarh ..		26,120	107,798	4.1								
	24	Rupar ..		28,387	116,155	4.1								
	25	Simla ..		8,505	35,003	4.1								
5. AMBALA.	26	Kot Khai ..		2,141	10,324	4.2								
	27	Kangra ..		20,923	118,374	4.4								
	28	Dehra ..		29,827	124,638	4.2								
	29	Narpur ..		21,401	95,470	4.5								
	30	Hanuipur ..		38,912	158,504	4.3								
	31	Palampur ..		31,033	137,052	4.4								
	32	Kulu ..		26,297	122,027	4.6								
	33	Hoshiarpur ..		59,437	247,196	4.2								
6. SIMLA.	34	Dastuya ..		50,924	215,600	4.2								
	35	Garhshankar ..		58,808	232,772	4.0								
	36	Una ..		56,891	231,851	4.1								
	37	Jullundur ..		66,681	289,396	4.3								
	38	Nawashahr ..		42,129	177,692	4.2								
	39	Phillaur ..		36,415	164,806	4.5								
	40	Nakodar ..		42,919	190,650	4.4								
	41	Ludhiana ..		66,212	285,953	4.3								
7. KANGRA.	42	Jagraon ..		36,943	164,553	4.5								
	43	Samrala ..		27,760	117,116	4.2								
	44	Ferozepore ..		49,325	221,737	4.5								
	45	Zira ..		30,528	160,373	4.6								
	46	Moga ..		46,113	209,558	4.5								
	47	Muktsar ..		42,134	209,645	5.0								
	48	Fazilka ..		53,686	290,935	5.4								
	49	Lahore ..		109,214	515,613	4.7								
8. HOSHIA- PUR.	50	Chunian ..		62,915	295,509	4.7								
	51	Kasur ..		69,721	320,214	4.6								
9. JULLUN- DUR.														
10. LUD- HIANA.														
11. FERGZE- PORE.														
12. LAHORE.														

SUBSIDIARY TABLE XI.

Statement showing average number of persons per house (in Tahsil or State). Census 1921.

District.	TAHSIL.				Average number of persons per house.	District.	STATE.				Average number of persons per house.	
	Number.	Name.	Number of occupied houses.	Population			Number.	Name.	Number of occupied houses	Population		
1	2	3	4	5	6	1	2	3	4	5	6	
26. LYALL- PUR.	94	Lyallpur	63,658	344,852	5.4	PUNJAB STATES ..			981,768	4,416,036	4.5	
	95	Samundri	30,304	224,806	5.7							
	96	Toba Tek Singh ..	42,570	232,426	5.5							
	97	Jaranwala	32,827	177,379	5.4							
26. JHANG.	98	Jhang	50,353	232,570	4.6		A. HAVING POLITICAL RELATIONS WITH THE PUNJAB GOVERNMENT			90,471	408,019	4.5
	99	Chiniot	43,033	211,188	4.9							
	100	Shorkot	25,949	126,801	4.9							
	101	Multan	53,411	243,385	4.6							
27. MULTAN.	102	Shujabad	29,890	132,091	4.4		1	Dujana	5,207	25,833	5.0	
	103	Lodhran	28,080	125,353	4.5		2	Pataudi	4,017	18,697	4.6	
	104	Mailsi	24,416	113,927	4.7	3	Kalsia	13,330	57,371	4.3		
	105	Khanewal	27,109	127,131	4.7	4	Simla Hill States ..	67,917	306,718	4.5		
	106	Kabirwala	30,654	148,377	4.8	B. HAVING POLITICAL RELATIONS WITH THE GOVERNMENT OF INDIA						
	107	Muzaffargarh ..	42,402	178,579	4.2							
108	Alipur	31,793	146,711	4.6								
109	Sinawan	23,603	108,970	4.6								
110	Leiah	29,008	134,218	4.6								
111	Dera Ghazi Khan ..	41,491	193,789	4.7								
28. MUZAFFAR- GARH.	112	Sanghar	18,820	84,759	4.5	5	Loharu	4,028	20,621	5.1		
	113	Rajanpur	20,794	105,008	5.0	6	Nahan	31,161	140,448	4.5		
	114	Jampur	17,561	85,496	4.9	7	Bilaspur	22,683	98,000	4.3		
		Biloch-Trans Frontier Tract		26,758		8	Mandi	39,455	185,048	4.7		
29. D. G. KHAN.						9	Suket	11,435	54,328	4.8		
						10	Kapurthala	65,491	284,275	4.3		
						11	Malerkotla	30,096	80,322	2.7		
						12	Faridkot	31,823	150,661	4.7		
DELHI.						13	Chamba	29,386	141,867	4.8		
						14	Patiala	338,683	1,499,739	4.4		
						15	Jind	62,580	308,183	4.9		
						16	Nabha	55,164	263,334	4.8		
						17	Bahawalpur	169,312	781,191	4.6		
						1	Delhi (Tahsil) ..	114,683	488,188	4.3		

SUBSIDIARY
Results of Special City

Serial No.	City, Ward or Division.	Total number of buildings.	Number of inhabited buildings.	NUMBER OF BUILDINGS WITH						NUMBER OF BUIL.			
				Ground floor only.	One upper floor.	Two upper floors.	Three upper floors.	Four upper floors.	Five upper floors.	No inhabitant.	1—5 inhabitants.	6—10 inhabitants.	11—15 inhabitants.
	1	2	3	4	5	6	7	8	9	10	11	12	13
	LAHORE CITY ..	35,144	28,829	15,435	9,730	7,759	1,908	298	14	6,315	14,996	8,432	2,819
	LAHORE CITY (excluding Civil Station).	21,941	18,451	5,702	7,110	6,958	1,863	294	14	3,490	9,019	5,979	1,954
1	Ward No. 1 ..	3,566	3,171	934	1,330	1,108	171	23	..	395	1,410	1,118	323
2	" " 2 ..	7,258	6,058	1,215	2,059	2,936	920	122	6	1,200	3,046	2,078	602
3	" " 3 ..	3,800	3,112	667	1,116	1,379	518	116	4	688	1,483	1,017	364
4	" " 4 ..	3,261	2,590	1,160	1,155	798	135	12	1	671	1,384	736	257
5	" " 5 ..	2,145	1,905	912	790	365	69	9	..	240	947	526	202
6	" " 6 ..	1,911	1,615	814	660	372	50	12	3	296	749	504	206
	LAHORE CIVIL STATION ..	13,203	10,378	9,733	2,620	801	45	4	..	2,825	5,977	2,458	864
7	Ward No. 1 ..	3,158	2,246	1,910	759	470	18	1	..	912	1,361	498	154
8	" " 2 ..	1,628	1,313	1,068	395	152	13	..	..	285	763	311	114
9	" " 3 ..	233	201	142	83	8	..	..	..	32	95	66	26
10	" " 4 ..	1,782	1,398	1,631	130	18	2	1	..	384	827	286	100
11	" " 5 ..	613	496	516	83	14	..	..	..	117	283	104	33
12	" " 6 ..	604	508	425	169	9	1	..	..	96	318	80	32
13	" " 7 ..	513	409	493	18	2	..	..	..	104	243	87	37
14	" " 8 ..	909	704	768	119	19	3	..	..	205	430	129	53
15	" " 9 ..	2,479	2,095	1,538	829	104	8	..	..	384	1,002	644	269
16	" " 10 ..	324	264	316	7	1	..	..	..	60	188	43	10
17	" " 11 ..	960	714	926	28	4	..	2	..	246	437	205	37
	AMRITSAR CITY ..	9,892	7,547	4,011	4,136	1,550	168	23	4	2,345	4,747	2,182	421
18	Ward No. 9 ..	3,299	2,490	1,920	1,004	345	23	7	..	809	1,650	643	118
19	" " 10 ..	3,655	2,948	982	1,864	723	70	13	3	707	1,911	885	118
20	" " 11 ..	2,038	2,109	1,109	1,268	482	75	3	1	829	1,186	654	185
	JULLUNDUR CITY ..	4,712	3,639	2,632	1,599	445	33	2	1	1,073	2,331	850	291
21	Ward Rasta ..	2,756	2,202	1,721	879	141	13	1	1	554	1,517	516	125
22	Ward Mohindarwan ..	1,956	1,437	911	720	304	20	1	..	519	864	334	166
	RAWALPINDI CITY ..	3,896	3,270	2,546	1,121	212	13	3	1	626	1,941	858	286
23	Ward No. 1 ..	967	800	605	320	37	2	2	1	167	405	228	109
24	" " 2 ..	310	203	210	87	13	..	..	..	107	160	33	8
25	" " 3 ..	66	35	33	30	3	..	..	..	31	17	8	3
26	" " 4 ..	395	358	187	138	61	0	..	..	37	235	81	26
27	" " 5 ..	645	564	428	195	22	..	..	..	81	302	185	43
28	" " 9 ..	1,117	983	887	195	34	..	1	..	134	606	248	75
29	" " 10 ..	390	327	196	156	42	2	..	..	69	216	75	22

TABLE XII.

Building Census held in February 1921.

BUILDINGS WITH					NUMBER OF BUILDINGS WITH								NUMBER OF BUILDINGS WITH AN AVERAGE PER INHABITED ROOM OF						Serial No.
16-20 inhabitants.	21-30 inhabitants.	31-40 inhabitants.	41-50 inhabitants.	Over 50 inhabitants.	1 inhabited room.	2 inhabited rooms.	3 inhabited rooms.	4 inhabited rooms.	5 inhabited rooms.	6-20 inhabited rooms.	21-50 inhabited rooms.	2 persons or less than 2.	Between 2 and 3 persons.	Between 3 and 4 persons.	Between 4 and 5 persons.	More than 5 persons.			
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
1,249	706	220	150	258	11,015	7,762	3,798	2,384	1,225	2,371	274	14,310	5,300	3,471	2,101	3,647			
817	427	118	61	76	5,405	5,944	2,892	1,805	861	1,457	87	9,433	3,253	2,044	1,306	2,415			
187	87	17	18	11	713	1,120	577	349	154	247	11	1,580	608	396	230	357	1		
188	89	19	15	21	1,820	2,179	905	485	227	413	29	2,997	1,121	688	436	816	2		
149	67	22	5	5	592	1,119	610	356	171	257	7	1,670	549	331	218	344	3		
107	68	21	7	10	956	669	367	238	135	212	13	1,367	407	267	170	379	4		
99	75	28	11	17	572	415	270	256	123	256	13	1,124	295	180	107	199	5		
87	41	11	5	12	752	442	163	121	51	72	14	695	273	182	145	320	6		
432	279	102	89	182	5,610	1,818	906	579	364	914	187	4,877	2,047	1,427	795	1,232			
86	61	18	26	42	1,237	438	199	103	50	178	11	1,112	377	291	151	315	7		
56	43	16	20	20	658	227	113	88	64	165	28	685	260	166	95	137	8		
7	5	3	..	..	94	50	26	17	9	5	..	94	56	35	10	6	9
47	35	17	18	68	849	183	104	61	38	125	38	515	312	230	136	205	10		
34	22	7	4	9	256	82	27	35	18	58	20	299	67	55	33	42	11		
15	14	15	4	..	281	105	36	20	10	40	10	266	106	69	29	38	12		
19	10	3	6	4	230	59	23	18	19	50	10	199	80	46	36	48	13		
39	27	8	3	15	399	79	45	25	31	101	24	117	105	74	26	82	14		
16	46	5	4	9	843	501	299	193	112	138	9	933	491	323	176	172	15		
3	7	5	..	8	222	8	4	5	6	17	2	115	58	39	19	33	16		
10	9	5	4	7	541	86	30	8	7	37	5	242	135	99	84	154	17		
120	54	17	2	4	1,332	2,666	1,487	1,033	514	505	10	5,296	1,069	511	280	411			
41	29	7	1	1	329	902	513	427	176	143	..	1,741	318	160	92	179	18		
25	4	5	..	..	667	978	538	353	189	221	2	2,204	412	151	81	100	19
54	21	5	1	3	336	786	436	253	149	141	8	1,351	339	200	87	132	20		
77	30	5	4	1	1,607	1,124	395	189	94	225	5	2,332	693	334	126	154			
23	15	1	4	1	1,026	2	191	92	62	83	3	1,342	450	193	93	124	21		
54	15	4	..	..	581	382	201	97	32	142	2	990	243	141	33	30	22
129	41	10	3	2	1,193	884	518	298	149	222	6	1,953	602	350	161	204			
44	9	4	1	..	312	213	127	77	44	27	..	382	196	111	57	54	23		
..	1	1	..	..	97	50	31	15	6	3	1	175	18	6	1	3	24
4	1	1	1	..	14	9	4	1	..	6	1	18	7	7	1	2	25		
14	2	..	..	..	129	61	51	40	20	57	..	282	41	25	5	5	26
19	12	2	..	1	169	157	92	63	35	45	3	320	120	59	27	38	27		
37	14	1	1	1	366	304	164	74	26	48	1	541	180	121	53	85	28		
11	2	1	..	..	106	90	49	28	18	36	..	235	40	21	17	14	29

CHAPTER III.

• Birth-Place.

63. Generalisation. 64. Immigration and Emigration Streams, Extra-Provincial. 65. Immigration and Emigration Streams, Intra Provincial. 66. Traffic returns and the Intra-Provincial figures of birth-place. 67. Further analysis of Railway statistics, and their application to Census data of migration. 68. Traffic returns and Extra-Provincial figures of birth-place. 69. Some difficulties of interpretation. 70. Maya or Atman ? 71. Graphic presentation of the data. 72. Comparison of the statistics with those of 1911. 73. Immigration from and Emigration to other countries. 74. Reference to tables.

General
isation.

63. The present chapter with the title of "Birth-place" replaces the chapter on "Migration" of the Census Report of 1911. The new title is more appropriate than the old, in that it more accurately describes the actual entry in the Census Schedules, which defines the district of birth of each person enumerated. For every person, then, actually in the Punjab between sunset and sunrise on the 18th March 1921, we are able to state more or less correctly in which district he or she was born. The working assumption has already been adopted that the chance that a given person will be included in the Census Schedules is 0.99. The next question that arises is, what is the chance that a person having been entered in the Census Schedules, should have his or her district of birth correctly entered?

Now, of 20,685,024 persons enumerated in British Territory in the Punjab, 17,850,279 represented themselves as born in the districts in which they were enumerated: while in the Punjab States out of 4,416,036 persons enumerated, 3,730,163 persons are classed as having been born in the State in which they were enumerated. Thus 86 and 84 per cent. respectively of persons found in British Districts and Punjab States, affirmed that they were born in the self-same district or State in which they were enumerated; or, taking the Punjab as a whole 86 per cent. of the persons resident in British Districts and States, claimed to be born in the very district or State in which they were enumerated. It seems unlikely that there were many people who erroneously stated that they were born in a district or State other than that in which they were resident, whereas, there may have been many misstatements, in all good faith, by persons who, having come to reside in a district or State when quite young, were under the impression that they were born in that district or State. Further, sentiment in Indian village life is intensively conservative and the term "pardesi" (hailing from another country) is one that every immigrant is usually anxious to divest himself of. This may not be true of the Canal Colonies where the percentage of immigrants is very high, and where, so far, there exists no temptation for a man to class himself as one of the indigenous "Jangli" inhabitants; but it is certainly the case in the old-established districts of the Punjab, and it is probable that the number of persons residing on the 18th March 1921 in the districts in which they were born, was less rather than greater than the ascertained figure of 86 per cent. of the total population.

Then, again, there seem to be possibilities of misstatement in respect of the birth-places of married women, particularly of Hindu and Sikh married women, who are frequently introduced to their prospective husbands by middlemen, who may find it desirable to conceal a woman's antecedents. In the Central Punjab misrepresentations both of a woman's caste and birth-place have often been the subject of litigation, and the number of cases which appear in the courts must be but a small fraction of the cases in which the husband has been successfully deceived.

All the latter class of cases would involve false entries in respect of birth-place in the Census Schedules. Lastly, a small number of fugitives from justice, if enumerated at all, would be almost certain to give false replies to all the scheduled questions.

In consequence, it is not likely that we should be carrying caution too far in adjudging that the probability of an error in the recorded entry of birth-place is 1 in 100. If this figure is tentatively accepted, the chance that any one individual is recorded in the schedules, and has a correct entry in respect of place of

birth, will be $0.99 \times 0.99 = 0.98$ very nearly. Thus we may conclude that there is an average error of 2 per cent. (on the true numbers) in the numbers shown as born in any district or State.

64. Now it has been possible to give only a very general conclusion as to the accuracy of the Census figures in respect of place of birth, and as it is based on a variety of assumptions, it must be guardedly applied.

According to the Census figures the number of persons born in the Punjab and residing outside it, and the number of persons born outside the Punjab and residing in it, on March 18, 1921, were 549,386 and 627,137 respectively; while the corresponding figures for the 10th March 1911 were 516,612. and 660,219 respectively.

Now if we adopt the approximate assumptions made by Mr. Middleton in para. 25 of Chapter I, viz.—

(i) that the annual streams of immigration and emigration have been constant throughout the decade,

(ii) that the annual death-rate among immigrants and emigrants can be represented as a definite annual decrement of 20 *per mille*,

we find that the annual numbers of emigrants from, and immigrants into the Punjab during 1911-1921 were, in round numbers, 14,000 and 11,000 respectively. The figures arrived at above, exclude, however, the number of persons who may have left the Punjab and returned to it, or who may have entered the Punjab and left it during the decade. This omission, which no appeal to the Census figures can possibly rectify, may account for ten times as many emigrants from, and immigrants into, the Punjab each year, as the 25,000 persons who are calculated to cross the provincial boundary each year. As about 800,000 persons are born each year in the Punjab, of whom 45 per cent.* reach their 16th birthday, it may be said that 14,000 out of 360,000 adult persons, or, say just under 4 per cent., emigrate, in the restricted meaning of the word, which implies that they stay away from the Punjab long enough to affect the Census returns.

65. Using the same assumptions as those denoted (i) and (ii) in the above paragraph, the annual number of persons moving from one district to another, and staying long enough to affect the Census returns, has been calculated, and the results are tabulated in Subsidiary Table V to this Chapter. The table has been calculated from Mr. Middleton's formula, which can be most conveniently expressed in the following notation:—

Let $(A \rightarrow B)$ denote the number of persons born in district A, who moved annually between the years 1911 and 1921 into district B, and did not return prior to the 18th March 1921.

Let $(A B)$ denote the number of persons born in district A and enumerated in District B in the Census year "n".

Then we have

$$(A \rightarrow B) = \frac{1}{4.5} [5 (A B)_{1921} - 4 (A B)_{1911}]$$

and, similarly,

$$(B \rightarrow A) = \frac{1}{4.5} [5 (B A)_{1921} - 4 (B A)_{1911}]$$

Now the application of the formula to the 812 possible reciprocal paths between the 29 districts of the Punjab, results, as will be seen in Subsidiary Table V, in no less than 225 negative values for the number of travellers annually of the type $(A \rightarrow B)$, between 2 districts. The most probable explanations of these negative values are, firstly, that a number of persons residing in 1911 in a district other than the one in which they were born, left the district before 1921, or that the death-rate among emigrants was greater than the assumed rate of 20 *per mille*. While recognising, therefore, that Mr. Middleton's formula is the outcome of a logical attempt to solve the very difficult problem of migration Kinematics from Census Statics, it does not seem to me to have succeeded, as the number of cases in which the formula breaks down, and gives a negative result, throws doubt on the numerical accuracy of the positive results. Having said so much in criticism, however, it is only fair to add that, qualitatively, the streams of intra-provincial emigration seem to be correctly indicated by Table V, and it may be taken to show the direction and relative strength of the inter-district

* This figure is adopted from Punjab Life Table P (Males) from the Actuarial Report on the Census of 1911, Vol. I, Part I of the India Report, page 187. The table for females was not constructed for the Punjab, but in Agra and Oudh (Table O) the percentage of females who reach 16 is 45.8, so the above figure is probably approximately correct.

currents of migration. What the absolute strength of the currents is can only be formed by direct observation, or by building up equations of far greater complexity than any which have been applied, at any rate, to Indian Census data.

As examples of the results of the inter-district migration which are con-

District to or from which the annual streams of migration are greatest.

From	Calculated persons leaving district each year.
Jullundur ..	8,837
Amritsar ..	5,545
Sialkot ..	5,514
Hoshiarpur ..	5,238
Gujranwala ..	4,909
Lahore ..	4,592
Gurdaspur ..	4,301
Lyallpur ..	4,179
To	Calculated persons reaching district each year.
Sheikhupura ..	21,690
Montgomery ..	10,242
Lyallpur ..	5,225
Lahore ..	4,776
Multan ..	3,652
Gujrat ..	3,072
Amritsar ..	2,357
Ferozepore ..	2,339

Largest inter-district streams of migration.

From District.	To District.	Calculated annual changes of residence.
Jullundur ..	Montgomery ..	2,089
Lyallpur ..	Montgomery ..	1,487
Lahore ..	Montgomery ..	1,423
Amritsar ..	Lyallpur ..	1,282
Hissar ..	Ferozepore ..	1,258
Jullundur ..	Lyallpur ..	1,081
Jhang ..	Lyallpur ..	991
Hoshiarpur ..	Jullundur ..	896

Between many districts of the Punjab the streams of migration are of course, sluggish, or practically stationary. Thus, naturally, relatively very few persons go each year from the plains districts to the hills, the Musalman of the North-West does not readily migrate to the Hindu-populated areas of the South, whilst the Sikh, favourably situated in the Central Punjab, is too ardent of gain to journey often beyond his district except to the canal colonies, or to Australia and America. Thus from Lahore to Kangra, from Attock to Rohtak, and from Jullundur to Karnal or Mianwali, to mention only a few instances, the annual movement of persons is, so far as the Census returns go, practically negligible.

Traffic returns and the intra-provincial figures of birth-place.

66. So far we have dealt only with those movements of the population which reflect themselves in the Census statistics: but it is now necessary to emphasize what a small fraction of the total volume of circulation these census-reflected movements represent, and, how difficult is the interpretation of the census figures of birth-place.

As a rule in Census Reports the number of persons enumerated in Area B, having been born in Area A, are spoken of simply as the emigrants from Area A, or the immigrants into Area B. If this use were equivalent to definitions of the terms "emigrant" and "immigrant", no exception could be taken to the practice on logical grounds. It so happens, however, that the terms "emigrant" and "immigrant" have connotations which differ from the "birth-place" definition, and a good deal of confusion of thought arises in consequence. Thus Mr. Gait (Vol. I, Part I of the Census of India Report for 1911, pages 89 and 90) distinguished five classes of migration, viz., casual, temporary, periodic, semi-permanent, and permanent. In the last class alone, apparently, is there a change of domicile.

*It is necessary continually to remind the reader that these figures refer only to those emigrants and immigrants who affect the census returns, and that actually the number of persons going to and from the districts named is far in excess of the marginally noted figures.

† But the possibility of a large correction for "circulation" discussed in paragraph 67, has to be borne in mind.

sentaneous with one's independent belief as to the facts, one may instance the large annual currents which exist to and from the districts named in the margin. The districts named are those for which the calculated streams of population are greatest.

It will be observed that of the 8 districts which have the greatest annual number of persons arriving and leaving each year,* Lyallpur, Lahore and Amritsar appear in both categories, a fact which is in conformity with the greater volume of business transacted in these cities, and in the case of Lahore of its importance as the headquarters of Government, both of which facts involve lengthy periods of changes of residence. Excluding the newly formed district of Sheikhupura, the districts between which there has been the largest calculated migration are those noted in the margin.

Besides the clearly-marked population drift towards the Colony areas of Montgomery and Lyallpur, it is apparent that there are considerable movements of people from Hissar to Ferozepore, and from Hoshiarpur to Jullundur. As Jullundur herself is pouring out her population towards the colonies it is striking that her numbers should be so strongly reinforced from the neighbouring district of Hoshiarpur. †

The distinguishing characteristics of the various types of migration are clearly given, but nowhere is the important point explicitly stated that the census figures necessarily give only a partial measure of the volume of permanent and semi-permanent migration, and a wholly inadequate measure of the temporary and casual forms of migration.* This point, namely the extent to which all kinds of migrations are repeated in the Census figures of birth-place, must now be examined, though without any refinement of analysis.

To come down to bed-rock, it is clear that a full solution of the migration problem would involve a knowledge of every movement of every single human being from the place in which he or she was born, from birth till death. Clearly the census schedules do not give us this information, and this at once forces us from the physical to the statistical plane. What are the elements of a full statistical solution? The answer is that it involves a description of the frequency distribution of the number of persons who leave their homes for (a) all the possible varying lengths of time and (b) for all possible lengths of journeys.

Then the broad classifications could be sub-divided minutely according to age (both at departure and return), sex, religion, caste, and finally according to the objects of the migration; but, in the beginning, if we could get any idea of the number leaving their homes for a day, a week, a month, a year or several years, a step towards a grasp of the fundamental problem would have been made.

In the Punjab practically the only material we have for forming any conclusions as to the journeys made by persons in the Punjab, are contained in the traffic statistics of the North-Western Railway.

Passengers carried by the North-Western Railway.

Year.	Total number of passengers (ordinary and military).
Calendar year 1911	53,559,788
" " 1912	54,047,738
Quarter ending 31st March 1913 ..	11,013,893
1913-14 { Half year ending 30th September } ..	61,319,543
" " " 31st March } ..	
1914-15 " " " " " ..	62,456,482
1915-16 " " " " " ..	66,899,142
1916-17 " " " " " ..	66,000,705
1917-18 " " " " " ..	56,832,990
1918-19 " " " " " ..	57,764,583
1919-20 " " " " " ..	58,059,030
1920-21 " " " " " ..	68,895,111
1921-22 " " " " " ..	73,790,248
Total	693,699,253

so that 3,647 miles of the North-Western Railway lie in the Punjab, to which must be added a few hundred miles of foreign lines also in the Punjab. We shall not, therefore, be far wrong in assuming that 2/3rd of the marginally noted numbers of passengers travelled in the Punjab. We may, therefore, conclude that in the decade 1911-1921, about 46,000,000 passengers travelled annually by rail in the Punjab. As the geometric mean of the populations of the Punjab and Delhi in 1911 (24,187,750) and 1921 (25,589,248) is 24,878,630 we may put the average number of railway journeys made in the Punjab each year as very nearly 2, for each man, woman and child.

Now we have already estimated in paragraph 64 that the total number of persons travelling each year, and staying away from their birth-place long enough to affect the census returns is approximately 25,000 for extra—and 70,000 for intra-provincial migration, so that the journeys made by these persons are far too few sensibly to affect the 46 million journeys made each year in the Punjab, and our estimate of roughly 2 journeys per caput of population per annum may be provisionally accepted. As going and returning count as 2 journeys, on the average each person in the Punjab makes one trip away from his home each year.

*Whether the effect of periodic migration is reflected in the Census figures, of course depends on whether the Census takes place while the particular seasonal pilgrimage is in swing or not.

To this number must be added, if we are to determine the inter-district traffic, all the persons who travel by road, and subtracted all journeys made within the confines of a single district (we may tentatively assume the equality of these two numbers), leaving us still with one trip per annum of each individual in the Punjab and Delhi, from one district to another. This estimate of one trip per annum per person is based on the assumption that the whole population contributes to the 46 million journeys made annually. If, however, we were to exclude the stay-at-homes, that is the persons who do not go outside the limits of their district from one year's end to another's, who would probably form about one-third of the population, the trips per head of the travelling population would amount to $1\frac{1}{2}$, annually, instead of one.

The question now arises "can we form any estimate of the length of time that persons generally spend away from their native district?" A cultivator may leave his home in Jullundur and Hoshiarpur in early youth and settle, until he feels death approaching 50 years later, in one of the canal colonies, a Government servant may spend 30 years of his life in district after district other than the one in which he was born, a woman may live with her husband for the great part of her married life returning to her parents after 10, 15, 20 or more years, a student may spend 4 or 5 years in a University town, a merchant may leave his home for a few weeks to fix up a business deal, a marriage party may be away for a few days, and countless litigants will make a single day's journey to put in an appearance on behalf of a relation who has been "entangled" in a case in another district, or to prosecute their own suits on appeal.

As 14 persons out of 100 of the population of the Punjab were absent from their native districts at the time of the census, if we assume that the amount of travelling, and visiting, and settling being done at the census was normal, it follows that the average time spent away from his or her home district by each inhabitant of the Punjab is about 51 days. Since the average number of trips (to and fro journeys) is one per head of the total population, it appears that the average duration of each trip is practically 7 weeks, and the time spent outside the limits of the district by each member of the travelling public is (on the same assumption as before regarding the proportion of the stay-at-homes) is about $2\frac{3}{4}$ months in the year. This represents the total average time spent outside the district of birth on each journey completed either by return to the point of departure or by death.

We reach, therefore, the conclusion that while the 14 per cent. of persons enumerated in 1921 in Punjab Districts other than their district of birth, is made up of groups of persons, staying some a few days, some a few weeks, some a few months and some for a few or several years, the average duration of absence being $2\frac{3}{4}$ months for each trip abroad, we are quite unable to specify from the census figures, what proportion of this period is contributed by persons staying away from their home districts for short or long periods. In particular it appears to be unjustifiable to assume, as is commonly done, that the greater portion of the 14 per cent. of persons found in other than their native districts at the time of the census, is composed of long-term settlers. This being so the indiscriminate use of the expression "emigrant" or "immigrant" to the persons absent from their district of birth, at the moment of the census enumeration, is to be deprecated.*

Further
analysis of
Railway
statistics,
and their ap-
plication to
Census data
of migration.

67. It is obvious that in general there will be an association between the distance to which a man departs from his birth-place and the time which he spends away. Thus a man might go to a neighbouring district for a few hours, but he is hardly likely to go from the Punjab to Assam, Burma or America for less than several months. On the other hand there must be many cases in which a woman only moves from one district to the adjoining one on marriage and then stays in her husband's house for the greater part of the rest of her life. As again the

*The basic idea which it has been sought to express, though simple, appears to have been neglected in Indian Census literature, so far as I have had access to it, and it will be well to express the argument in definite algebraic form. Let $n_x \delta x$ be the number of persons who stay away from their district of births for x to $(x+\delta x)$ days in the year. Then, the chance that one of these persons will be enumerated at the census in a district other than his own will be x/y where y is the number of days in the year, so that the total number of persons enumerated

away from their homes will be $\int_0^y x n_x dx$. It is clear that n_x is much greater for values of x less than 1 month, than it is for longer periods, and it is probable, therefore, that,

$$x n_x dx > \int_{3 \text{ months}}^y x n_x dx$$

3 months.

Unless, therefore, we are prepared to apply the term "emigrant" to persons making visits of 3 months and under, it might be wrong to apply the term to more than a fraction of the crude figures obtained from the census of the numbers enumerated in places other than their native district.

longest migrations (in time) made by Punjabis will be mostly composed of colony settlers, so that the duration of a visit (using the phrase to cover all journeys whatsoever) will first increase, and then finally decrease with the distance. On this subject the Railway statistics afford us some precise information of a limited type.* Thus the statement below shows the average lead of 1st, 2nd, inter and 3rd class passengers on the North-Western Railway since 1911.

Period.		Average lead of passengers (ordinary and military)			
		I class.	II class.	Inter class.	III class.
		Miles.	Miles.		Miles.
Half-year ending	30-6-1911	122.06	117.84	51.06	40.56
	31-12-1911	99.60	101.59	46.38	41.00
	30-6-1912	123.55	92.88	51.52	40.14
Quarter ending	31-12-1912	131.40	103.40	53.43	39.34
	31-3-1913	130.40	112.27	52.27	40.58
Half year ending	30-9-1913	120.01	95.91	52.16	37.05
	31-3-1914	136.07	117.16	51.91	39.47
	30-9-1914	133.84	111.69	51.11	37.33
	31-3-1915	150.56	150.31	53.62	40.43
	30-9-1915	139.38	128.49	51.99	39.11
	31-3-1916	153.90	132.35	53.77	41.38
	30-9-1916	153.91	143.17	59.93	40.01
	31-3-1917	169.63	141.44	53.83	46.25
	30-9-1917	164.17	150.08	55.90	45.92
	31-3-1918	155.51	146.38	60.26	48.60
	30-9-1918	176.15	157.22	62.47	50.25
	31-3-1919	149.50	157.17	61.85	53.06
	30-9-1919	178.24	105.83	65.27	52.36
	31-3-1920	177.70	119.81	66.69	51.76
	Year ending 31-3-1921	172.87	109.30	65.71	49.15
	31-3-1922	151.58	99.92	63.63	44.02

Taking from the table the distance travelled by each class of passengers in the year ending the 31st March 1922 and multiplying the figures by the relative numbers of passengers we have approximately--

	Relative number of passengers.	Distance travelled.	Relative passenger-miles
		Miles.	
1st class	1	155	155
2nd class	6	100	600
Inter class	24	61	1,536
3rd class	175	44	20,900
Sum	506		23,191

The average distance travelled by all passengers, which is the quotient of the sum of the relative passenger-miles divided by the sum of the relative number of passengers, is thus found to be 45 miles. These distances may be compared with those for the year ending 31st December 1912, which are--

	Relative number of passengers.	Distance travelled.	Relative passenger-miles.
		Miles.	
1st class	1	127	127
2nd class	4	98	392
Inter class	22	51	1,188
3rd class	63	40	22,520
Sum	590		24,227

Thus the average distance travelled by all passengers on the North-Western Railway in 1912 was 41 miles, so that the mean distance per passenger has increased by 4 miles during the decade. Seeing that with this increase the speed of travel has decreased from 20.36 miles per hour for passenger trains and 14.27 for mixed trains in 1911, to 19.41 and 13.05 miles per hour respectively in 1922, the

*I am indebted to the courtesy of the officials of the North-Western Railway for supplying me with a great mass of statistics, of the most interesting character, relating to Railway traffic, such as passenger density for every mile of the Railway, number of trains run, and so forth, of which time forbids examination, beyond that given in the present and foregoing sections. Mr. Fakir Chand, Auditor of Statistics, N.-W. Ry., has been most particularly helpful.

approximate average time spent on railway journeys by passengers in passenger trains from station to station, has increased from 2.01 hours to 2.32 hours. If we include, say, 10 to 15 minutes as the average time spent in the train by passengers at the terminal stations, the average time spent on journeys will be about 2½ hours. We might have anticipated therefore that about one-three-hundredth of the population would be enumerated in Railway trains, that is to say, 8,000 persons.

As a matter of fact 69 trains with a total of something less than 14,500 passengers were enumerated on the census night*, so that the census figures are in sensible agreement with the calculation made from the known volume of passenger traffic, and the known average lead and speed of transit.†

The ascertained mean length of journeys by rail in the Punjab has been seen to be a little over 45 miles for each passenger. The modal (or most usual) length of journey will also be less than 45 miles, and the conclusion reached is that the majority‡ of the journeys made by rail on the North-Western Railway are less than 45 miles in length. This implies that a very considerable proportion possibly 50 per cent. of the rail journeys made are between adjacent districts or between two different points of the same district, and, as we have seen, the duration of the visits so made will on an average be below 2¼ months so that the term "migration" in the restricted sense cannot be applied to them. §

Finally, then we may say, in general, that the census figures showing the percentage of those born outside the confines of a particular district and enumerated in it, are made up of two parts, namely—

- (i) immigrants proper, as defined by Sir Denzil Ibbetson for the Punjab (*vide* para. 134, page 58 of vol. 1 of the Punjab Census of 1891, a classification followed by Sir Edward Maclagan in Chapter X, page 273 of the Punjab Report for 1901), or by Mr. Gait (*vide* para. 134, pages 89 and 90, Part I, vol. 1 of the Government of India Report for 1911),
- (ii) the circulating population, made up mostly of persons who are making short trips on business, or for social ceremonies.

To interpret the whole, or even in the greater part of the birth-place figures as the outcome of migration, except to and from places at great distances, and especially for foreign countries, as any form of migration, is to fail to recognise the true meaning of the census returns.

68. Of the 25,101,060 persons enumerated in the Punjab 627,137 or 2.5 per

Emigrants outside India.

Province where enumerated.	Punjab, Persons.	Delhi, Persons.
Hong Kong ..	1,192	..
Konya ..	4,823	..
Sudan ..	16	..
Nyasaland ..	20	..
Tanganyika Territory ..	326	..
Straits Settlements ..	1,877	..
Federated Malay States ..	7,789	..
Unfederated Malay States ..	1,373	..
Ceylon ..	174	21
Cyprus ..	122	..
Southern Rhodesia ..	16	..
Somaliland Protectorate ..	125	..
South Africa ..	186	..
Fiji ..	449	..
Grand Total	18,487	23

cent. were born outside the Punjab. On the other hand 549,386 persons born in the Punjab were enumerated outside the Province, of whom 530,899 were enumerated in other parts of India. The details of the persons born outside India (so far as they have been reported) are given in the margin.

In paragraph 64 of this chapter we have found the annual emigration and immigration from and into the Punjab to be approximately 14,000 and 11,000 persons respectively, and we may now compare these figures with the traffic returns of the North-Western Railway showing persons crossing the boundary of the Punjab and Delhi. The figures may

*Between 7 p.m. on the 18th March 1921 and 6 a.m. on the 19th. The arrangements for train and station enumeration were very thorough, a supervisor and enumerators (one of whom was a female) being responsible for each train, the supervisor and male enumerators accompanying it throughout the night. The net effect of the scheme of enumeration was that it gave the number of persons actually in transit at 6 a.m. on the night of the 18th March 1921. Any person arriving at a station after that time was enumerated at the station itself, except for a certain number who were accommodated in a special enumeration van. Unfortunately there are some rather serious errors in the compilation of the returns for running trains. Thus the only train enumerated in the Amritsar District was 5 Up, which could not contain more than 1,000 passengers, and actually contained 403, though 2,362 persons are shown in transit. The figures given in the last column of Imperial Table III for Amritsar include 1,959 persons, who were counted in the platform enumeration, and do not belong to a running train at all.

†Conversely one might have deduced the mean speed (given the lead) or the mean lead (given the speed) of journeys by rail from the Census figures of numbers of passengers. This converse process is appropriate to the calculation of the mean time spent on journeys by road.

‡Half the total number of journeys will exceed, and half will fall short of the value of the median journey. The median value could have been found approximately, given the mode, from the well-known formula. $\text{mean} - \text{mode} = 3 (\text{mean} - \text{median})$.

§It might seem that these journeys should be classified under the heading of "casual" migration in Mr. Gait's scheme: but his restriction of the term to movements between "adjoining villages" precludes this; and we are forced to believe that a great proportion of the movements which affect the census figures have been ignored.

contain a certain amount of overlap, as, while the exact number of passengers reaching and leaving the Punjab between the following stations is known :—

Sarsawa and Kalanaur

For the United Provinces,

Attock and Khairabad

Mari Indus and Kalabagh

For the North-West Frontier Province.

Taxilla and Usman Khatar

Khushalgarh and Nak Band

Dhandi and Reti

For Simla and Baluchistan,

yet these may include some of the through passengers received from foreign lines at Delhi and Bhatinda.

The traffic figures of passengers

Passenger traffic entering and leaving the Punjab from and to the Provinces named, in 1922.

Province.	Entering Punjab.	Leaving Punjab.
United Provinces ..	759,339	813,309
North-West Frontier Province	777,392	719,038
Sindh ..	276,870	302,593
Other Provinces <i>via</i> Delhi ..	132,216	78,231
Other Provinces <i>via</i> Bhatinda	132,837	155,541
Totals ..	2,078,648	2,068,715

to and from the Punjab and Delhi of all classes, for 1922, are those noted in the margin, from which it will be observed that a total of over 4 million persons pass annually across the Punjab borders by rail as compared with the 25,000 whose movements are ascertained from the census returns.

Following the same lines of reasoning as in the preceding paragraph dealing with the internal movements of the population of the Punjab, we conclude

that the average duration of stay outside the Province of persons crossing the border is $\frac{550,000}{2,000,000} \times \frac{3}{2} \times 12 = 5$ months. Thus the trips made outside the Punjab last, on the whole, nearly double the time that intra-provincial trips do. Here again it becomes largely a question of an appropriate definition of migration, but if we adopt 3 months as the dichotomic period below which a visit to another province, or abroad, is not classed as a migration, we find that a very considerable portion of the percentage of Punjabis enumerated elsewhere must be put down as due to the circulation of short-term visitors, and not to migration proper. As journeys by road have been excluded,* and as these would swell the figures of trans-frontier railway traffic, the figures for the average duration of a visit must be correspondingly reduced. We may, therefore, provisionally estimate the duration of extra-provincial journeys as about 5 months. If this figure seems lower than it ought to be compared with the 2 $\frac{3}{4}$ months' duration of intra-provincial journeys, we must remember that on the one hand, it includes an enormous number of visits, between adjoining districts which happen to lie in different provinces, and, on the other, that the number of permanent settlers in other provinces from among persons born in the Punjab is very very small. Both these causes will tend to depress the average duration below expectation, the tendency being to associate extra-provincial migration only with long period visits made to Bombay, Bengal, Burma, Kenya, the Malay States, England or America.

69. It is, so far as the speedy completion of their work is concerned, a great advantage which some writers enjoy, that they are prepared to disregard the existence of logical fallacies so long as the facts advanced are supported by figures. To a writer of this type the fact that 11.5 per cent of the population is recorded as having been born outside the district—the case of Multan, 14.6 per cent, in the case of Rawalpindi, and 32.8 per cent in the case of the Kalsia State, is proof that there is a relatively larger number of immigrants into Rawalpindi than into Multan, and into Kalsia than into either of the other places. One possible fallacy, arising from the necessary inclusion of movements which I have classed under the term "circulation," has been dealt with in paragraphs 68 and 69, but it seems possible that an even subtler fallacy may lurk behind the apparent simplicity of the data. It might take months, or even years, to analyse down to its elements the concept which I shall attempt to expound, and only a preliminary examination of the principle will

Some difficulties of interpretation.

*The exclusion is unavoidable, as no statistics of road-traffic are available.

be set forth. In its extreme forms the principle is simple and indeed obvious, and we may start by examining the figures shown in the margin.

Table showing the percentage of persons born in a given area who were (or would be) enumerated in that area.

Area.	Approximate land area in square miles.	Percentage of natives.
1. The world	55,000,000	100
2. India (1911)	1,803,000	99·7
3. The Punjab (1921)	137,000	97·5
4. Average British District or State in the Punjab (1921)	3,400	86·1
5. A point on the earth's surface	0	0

The entries in rows 1 to 4 will doubtless be accepted as indicating that with the diminution of extension, the percentage of natives must decrease, or the percentage of foreign-born must increase. The entry in row 5 is an obvious deduction from the assumption of *ab initio* mobility of the organism.*

Actually the percentage of foreign-born in every area will never be a single-valued function of the area itself or of the population; but for our present purpose we may say that, in general, the percentage of foreign-born in any region increases as the area or population of the region diminishes. This is *not* a humano-sociological or economic law, but a law of animal movement in relation to the properties of space. Now, just as there is an increase in the percentage of foreign-born down from the world (0) to the average of a Punjab district or State (13·9), so it seems indisputable that the percentage of foreign-born must increase continuously (though as a multiple-valued† function of the area) as the districts or States considered diminish in area or population. Though it is clear that the law is true as a generalisation covering wide variations of area, it is important to see to what extent it holds for the variations in size which occur in the different districts and States of the Punjab. If it does hold we can predict that there will probably be a negative correlation between the population of a district and the percentage of foreign-born. Actually we find a correlation of $-0\cdot24 \pm 0\cdot098$ subsisting between the two variables, and the law therefore is applicable even within a comparatively limited range of variation of area.‡

The equation expressing the percentage of foreign-born (F) in a district or State in terms of the population (P) of the district or State, is

$$F = 15\cdot9 - 5\cdot57 \times 10^{-6}P.$$

We have thus reached the important conclusion that it is idle to make deductions from the percentage of immigrants into a district or State till the crude percentage has been corrected for the size or population of the district or State concerned. An approximate correction would be to subtract from the crude percentage of foreign-born the number deduced from the above regression equation. What the full correction would be, were an exact investigation of this point carried out, must be left to future discovery.§

In closing this section I will merely put before the reader a question, which will pointedly show the importance of the foregoing discussion, in preventing the formation of hasty and fallacious judgments on the problem of migration.

The following percentages of persons foreign-born to the areas named and enumerated in the self-same areas are recorded for the 1921 Census:—

Area.	Population.	Percentage of foreign-born.
Rohtak District	772,272	12·3
Dujana State	25,833	26·3
Jullundur District	822,544	10·9
Kapurthala State	284,275	17·1

*It would not be true of the motionless vegetable kingdom, where the percentage of natives will always be cent. per cent.

†I make no apology for borrowing an occasional phrase from the technique of that reservoir of accurate expression, to wit mathematics, though I am well aware that there is a tendency for the classical man to regard any idea he cannot grasp instantaneously as either erroneous or futile. It is time he became more Socratic in his outlook.

‡This correlation co-efficient, as well as the regression equation which follows, are found after exclusion of the Colony districts of Lyallpur, Montgomery, Shahpur and Sheikhpura.

§ Unless my very limited knowledge of the literature of Census enquiries is in error, the point has not been elucidated so far. G. H. Knibbs in a most detailed and illuminating treatise on "The Mathematical Theory of Population" printed as Appendix A, Volume 1 of the Census of the Commonwealth of Australia, 1917, does not deal with the matter in his chapter on migration.

Dujana State is in the Rohtak District. Kapurthala State and the Jullundur District adjoin. Is the percentage excess of foreign-born in the two Punjab States to be attributed to political, sociological and economic causes? I leave the reader to ponder the question for himself in the light of the arguments adduced in this paragraph, and to admit that but for these arguments his answer would have been an immediate, but unjustified affirmative.*

Should the reader desire, in spite of all that has been said, to compare the percentage of foreign-born persons in one district with that of another which differs widely from it in population, he may, provisionally, apply the corrections in the following table, which will reduce all districts to a standard population of 500,000.

Table giving the correction to be applied to the observed percentage of foreign-born in any district, to reduce it to the common basis of a district of a population of 500,000.

The correction must be subtracted from the observed percentage when it is negative, and added when it is positive.

Population of District.			Correction to percentage of foreign-born (i.e., persons not born in District).	
50,000	..	..	—2·5	per cent.
100,000	..	..	- 2·2	"
200,000	..	..	-1·7	"
300,000	..	..	—1·1	"
400,000	..	..	—0·6	"
500,000	..	..	0	"
600,000	..	..	+0·6	"
700,000	..	..	+1·1	"
800,000	..	..	+1·7	"
900,000	..	..	+2·2	"
1,000,000	..	..	+2·8	"
1,100,000	..	..	+3·3	"
1,200,000	..	..	+3·9	"

70. Any one who has followed with any degree of attention the reasoning of this and of the preceding chapter, will have perceived that more caution is desirable in drawing conclusions from statistical material than has been customary in the past. One is, in fact, almost tempted to assert that knowledge based on direct appeal to statistics is the "Mâyâ", or "great illusion" of the old Vedantic philosophy, and that though the substance can be resolved from the shadow, it is only by steadfast vision aided by the crystal lenses of mathematics shaped by such master minds as those of Laplace, Gauss, Francis Galton and Karl Pearson. Mâyâ, or
Atman?

To flaunt unanalysed figures on printed pages is, perchance, but to increase the number of dancing shadows, making the perception of truth more, rather than less difficult than before.†

71. With the warnings emphasized in the preceding paragraphs in mind the data of birth-place summarised in graphic form for the whole of the Punjab will now be presented. Once, again, the most appropriate form of presentation appears to be that of systems of isopleths drawn on a small scale map of the Punjab, showing the most prominent features of the place-to-place variation of the birth-place statistics. The isopleths in each case are drawn from the tahsil figures. Now the census schedules do not record the numbers of persons enumerated in each tahsil who were born in that particular tahsil, but only the percentage of persons born in the district in which the tahsil was situated and enumerated in the tahsil. Naturally, the proportion of persons born in a given district and enumerated in a tahsil in that district, will be greater than the number of persons born and enumerated in the same tahsil. Thus, at the outset the percentage figures of foreign-born persons in each tahsil will be greater (though how much greater it would only be possible to calculate by elaborate mathematical reasoning) than the figures adopted for the purpose of the diagrams. Graphic
presentation
of the data.

*If time permits (an unlikely contingency) I hope to examine in an Appendix what correction should be applied to the crude figures of foreign-born for a given area and population and rate of movement.

†Thus, if, in respect of this problem of migration, a metaphor may be permitted, it is as though one instantaneously observed myriads of flying-fish emerging from and disappearing into a sunlit sea, and attempted to determine by intuition alone the movements made below the surface.

The diagrams consist of—

Diagram 27, isopleths of percentage numbers born in each district and enumerated in each tahsil or state;

Diagram 28, isopleths of percentage of persons enumerated in each tahsil or district and born in a contiguous district or state;

Diagram 29, isopleths of percentage of persons enumerated in each tahsil, but born outside the Punjab.

As regards diagram 27, the modification just noticed must be applied, and, if we may lapse for a moment into an interpretation, with all the examples of statistical fallacies confronting us, we may conclude that the Lyallpur and Montgomery colonies contain the largest number of emigrants! Also the greater proportion of the stay-at-home population of the Punjab is included in the Rawalpindi and Multan Divisions (excluding the colonies) and in the Himalayan and Sub-Himalayan tracts. The reader will, doubtless, observe impatiently that these conclusions could have been reached without any elaborate refinements of analysis. Very possibly this is so, but if he supposes that a cursory glance of the figures will throw light on the relative amount of migration into the various districts within these wide limits, then he will fall into a grievous error due to one or other of the fallacies previously examined.

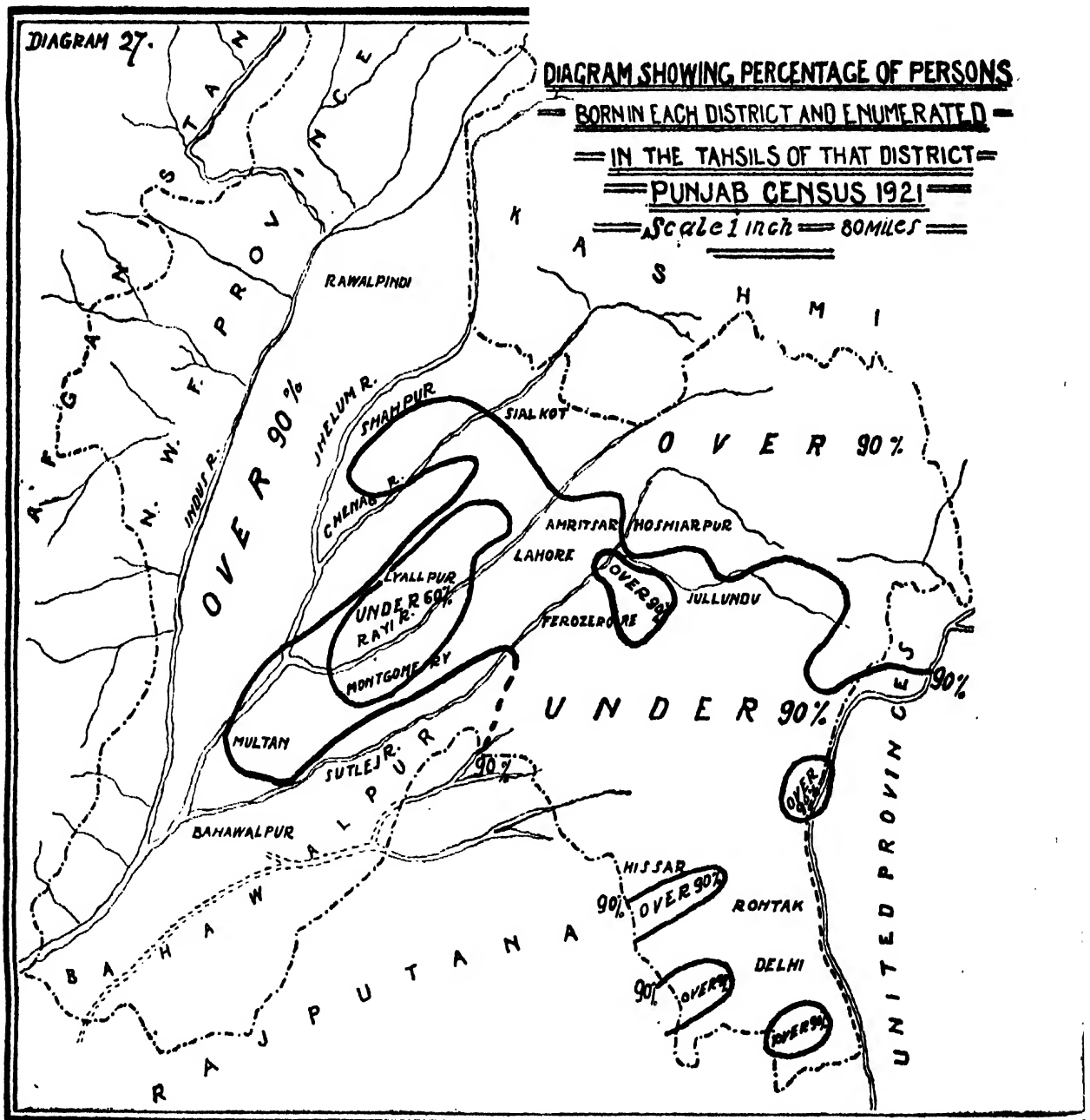
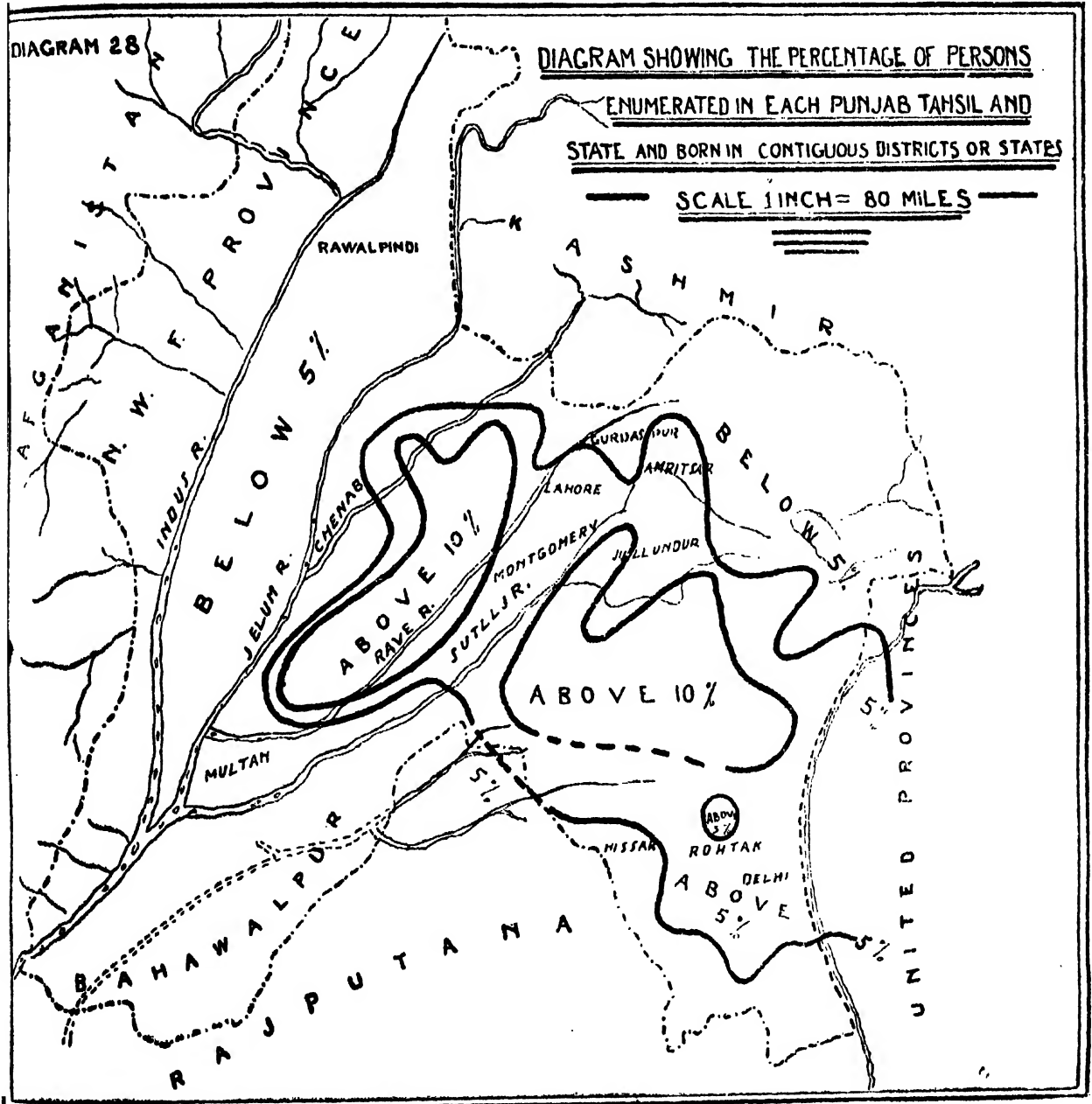
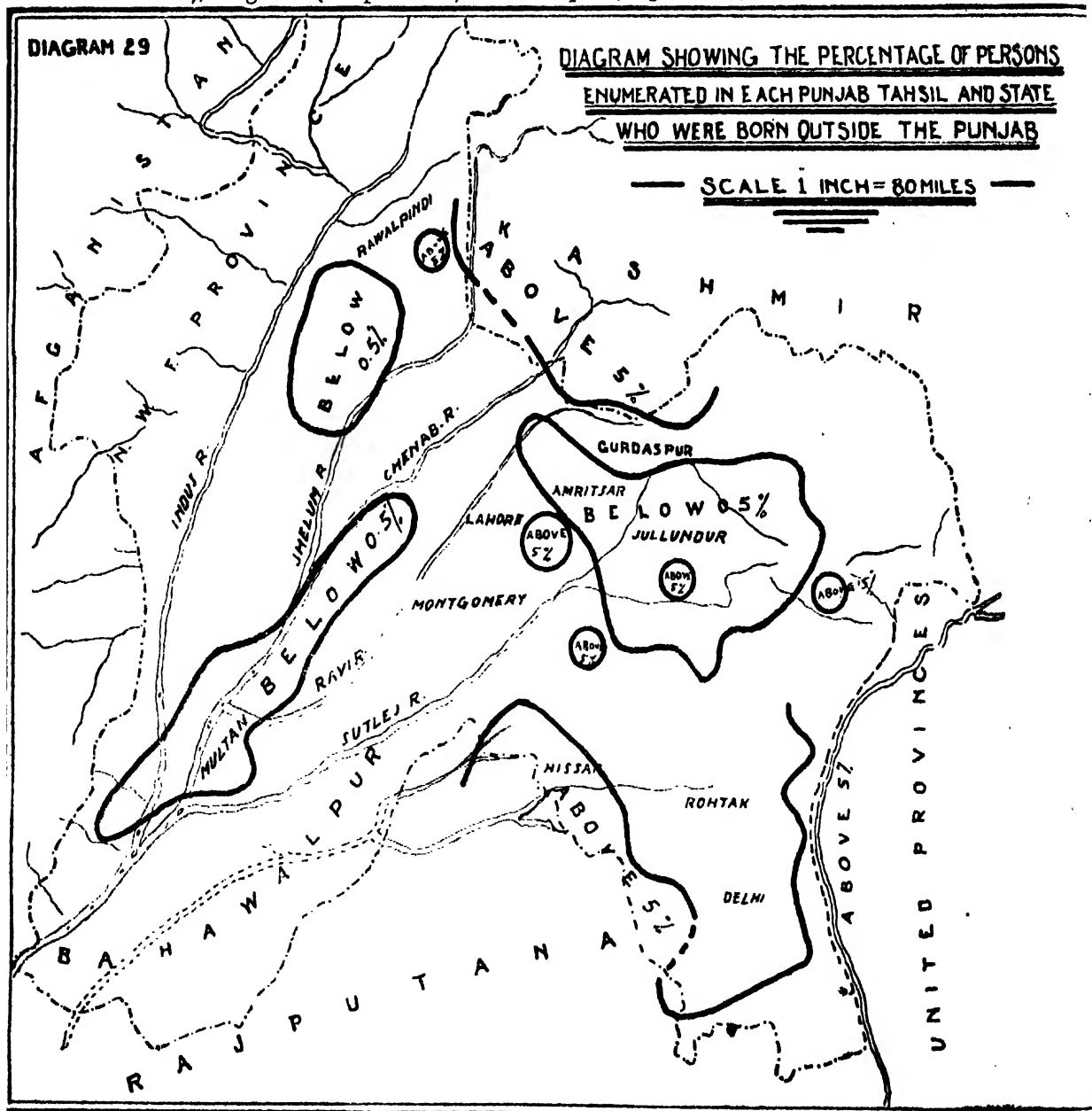


Diagram 28 shows the percentage number of persons in each tahsil who were born in contiguous districts, contiguous that is, not necessarily to the tahsil itself, but to the district in which the particular tahsil is situated. These figures must be interpreted in the light of the remarks regarding the circulation of the population, and, where there are areas within which the percentage of persons born in contiguous districts is high, say over 10 per cent., the characteristic must be attributed as due in part to the great daily movement of the population, and not as wholly due to immigration proper. These figures are particularly in need of correction for the rapidity of the population circulation, for the length of the boundary line between each district and its neighbours, and for the presence or absence of natural barriers of inter-communication.



Lastly, diagram 29 which shows the percentage of persons enumerated in each Punjab tahsil and State and born outside the Punjab, the figures at first sight seem to be perfectly straightforward, and it might appear as if there were no obstacles to an appreciation of the shape of the isopleths. We observe, for instance, that the regions of high percentage numbers of foreign-born, say, above 5 per cent., are included in three narrow strips, one along the Jumna adjoining the United Provinces, the next in the areas of Ferozepore and Hissar which adjoin Rajputana, and the third in two narrow pieces of territory belonging to the Murree and Sialkot tahsils adjacent to Kashmir. For the rest, the percentage of persons born outside the Punjab, enumerated in the various Punjab tahsils is very small, and there are large tracts comprising the central districts of the Punjab, and a long narrow region running parallel to the course of the Chenab from Chiniot in the Lyallpur district to Rajanpur in the Dera Ghazi Khan district, together with the tahsils of Pindigheb, Talagang, Khushab, Chakwal and Fatehjang, in which the percentage of persons born outside the Punjab does not exceed 0.5 per cent. The long strip lying along the Chenab referred to above includes Jhang, and grazes Lyallpur, and it is clear that the canal colonies have not become the happy hunting ground of the speculator from outside the Punjab, though this is less true of Montgomery (3 per cent.) and Khanewal (2 per cent.) than it is of Lyallpur (1.1 per cent.), Sargodha (1.7 per cent.) and Shahpur (.5 per cent.).



72. The figures for some of the salient birth-place statistics will now be

Number of persons born in the specified localities and enumerated within the Province.

Born in	Enumerated in	1901.	1911.	1921.
Punjab District or State	Same District or State	978	944	861
Contiguous District ..	District ..	19	41	75
Non-contiguous District ..	District ..	5	15	39
Outside the Province	The Province ..	..	..	-

given in comparative form for 1921 and for previous censuses, those of 1911.

though mostly without any attempt to solve the many difficult problems of interpretation which they present. Thus the table in the margin shows the change in the number of persons *per mille* enumerated in the districts of birth, in

contiguous districts, and in other districts of the Province, since 1901.

The extent to which the other Provinces of India contribute to the foreign-born population of the Punjab is shown in the following table :-

Immigration from other Provinces to Punjab and Delhi

Province or State.	1921.	1911.	Province or State.	1921.	1911.
Rajputana Agency ..	257,716	218,152	Mysore ..	304	273
United Provinces ..	269,239	219,913	Baroda ..	119	225
Kashmir ..	75,344	72,369	Andaman-Nicobar ..	72	100
North-West Frontier Province ..	34,868	35,271	Assam ..	496	..
Bombay ..	11,223	10,583	Bihar and Orissa ..	1,110	..
Bengal ..	5,950	5,136	Gwalior ..	3,250	..
Eastern Bengal ..	..	483	Cochin ..	36	..
Baluchistan ..	3,609	3,704	Travancore ..	9	..
Central India Agency ..	913	3,630	India, unspecified ..	1,806	1,155
Burma ..	1,667	1,550	French and Portuguese Settle-ments	188	100
Central Provinces and Berar ..	2,844	1,500			
Madras ..	2,136	1,110			
Hyderabad ..	1,466	689	Total ..	674,395	605,952

Although in 1921 a great number of persons from Gujrat emigrated to

Districts.	Emigrants to Burma.	Immigrants from Burma.
Amritsar ..	2,388	211
Lahore ..	1,659	263
Jhelum ..	867	70
Patiala ..	607	116
Rawalpindi ..	956	72
Ludhiana ..	865	301
Jullundur ..	685	26
Gujrat ..	1,074	65
Unspecified ..	11,837	503

Burma, as in 1911 the districts of Lahore and Ludhiana contained the greatest number of immigrants from Burma. Of course a certain number of the recorded immigrants from Burma are not Burmese at all, but merely the children of Punjabi emigrants born while their parents were residing in Burma. Further details are given in the marginal table.

The variation in the proportion of females to 100 males enumerated outside

Proportion of females to males of Punjab and Delhi.

District.	PROPORTION OF FEMALES TO EVERY 100 MALES.			
	Immigrants.		Emigrants.	
	1911.	1921.	1911.	1921.
HINDU.				
Kangra ..	126	142	145	152
Ambala ..	184	192	150	157
Rohtak ..	331	351	234	329
Karnal ..	193	243	193	240
Hissar ..	179	263	189	157
Jind ..	208	218	259	336
Average ..	202	232	196	240
MUSALMAN.				
Attock ..	122	101	94	74
Bera Ghazi Khan ..	68	69	71	54
Jhelum ..	167	158	84	78
Rawalpindi ..	83	68	148	138
Gujrat ..	174	93	96	102
Muzaffargarh ..	79	75	72	74
Mianwali ..	76	63	85	79
Average ..	110	90	90	84
DELHI.				
Delhi ..	214	129	261	342

their district or State of birth since 1911 is shown in the marginal table. I am very loath to believe that the differences between the 1911 and 1921 figures is the result of any change in the fundamental customs of the country, and that Hindus are more inclined than ever to choose their wives from distant districts, or that Musalmans tend to go less further afield for their brides than in 1911. The decrease of the relative number of foreign-born females in Delhi from 214 per cent. to 129 per cent. is rather more than one could wisely attribute to the result of random sampling. A very full *ad hoc* enquiry would be necessary in order to decide whether the Delhi Hindus were relying on the locally born women as their brides more than they did 10 years ago. The truth probably is that in the course

of the last decade there has been a vast influx of foreign-born male labourers who have not brought their female relatives with them at all, and, until these males either settle down in Delhi, or depart from the Province, the comparative smallness of the number of foreign-born females will continue. When the Delhi Province emerges from its position of unstable economic equilibrium it seems probable that the percentage of foreign-born females to males will revert to about its old figure of 200, provided, of course, that the composition of the Hindu population is not materially altered by the formation of the new Province.

Immigra-
tion from and
Emigration
to
other
countries.

73. The numbers of persons born in foreign countries and enumerated in the Punjab and Delhi in 1921 was

Countries.	Total	Punjab.	Delhi.
Asiatic countries	18,227	17,953	274
European ..	19,184	16,273	2,911
African ..	640	583	63
American ..	331	307	24
Australasian ..	149	136	13
Total	38,537	35,252	3,285

the increase largely to the development of commerce and industry. If this explanation is accepted the decrease in the number of foreigners in 1921, to about the same numbers as in 1901, would be explained by the setback to commercial relations caused by the war. Most of the decrease it will be observed is due to a falling off of more than 10,000 persons born in Asiatic countries other than India. The decrease in the number of Europeans in the Punjab is possibly to be explained by the reduction of the British Army; but on this point I have no exact information. The details of the emigration from Asiatic countries is shown in the marginal table.

Countries.	Total.	Punjab.	Delhi.
Afghanistan	10,689	10,603	86
China	426	423	3
Nepal	4,913	4,780	133
Tibet	1,681	1,678	6

The details of immigrants from European countries is shown in the marginal table. The most notable difference between the 1911 and 1921 figures is the reduction in the number of Germans from 76 in 1911 to 7 in 1921. Belgians have decreased from 61 to 35 and Maltese from 60 to 7. I am surprised to see that only 5 Greeks were enumerated in the Punjab in 1921 as the Firm of Messrs. Ralli Brothers alone would supply that number.

Countries of birth.	Total.	Punjab.	Delhi.
United Kingdom of Great Britain and Ireland	18,903	16,068	2,835
Portugal	56	51	5
Germany	7	5	2
France	51	40	15
Belgium	37	37	..
Italy	21	14	7
Malta	7	4	3
Spain	11	8	7
Switzerland	14	6	8
Russia	2	1	1
Holland	..	..	..
Austria Hungary	..	..	..
Greece	5	..	3
Sweden and Norway	3	..	1
Turkey in Europe	6	..	4
Denmark, Gibraltar and Iceland	20	17	3
Unspecified	33	16	17
Total	19,184	16,273	2,911

Birth place.	Total.	Punjab.	Delhi.
England and Wales	14,714	12,722	1,992
Scotland	1,306	1,197	109
Ireland	2,883	2,149	734
Unspecified	..	..	..
Total	18,903	16,068	2,835

table is very incomplete, and contains no record of the number of Punjabis in Europe or America.

74. The chief figures as regard birth-place are given in Table XI, Part A, which gives the detail for Districts and States, Table XI, Part B, which gives details for cities and selected towns, and Table XI, Part C, which gives details for Delhi Province and Delhi City. A word of warning is necessary as regards the entries in the first row "Punjab" of Table XI, Part A, as this does not mean that the figure entered opposite the row, and under any particular column, gives the number of persons enumerated in the particular district who were born in the Punjab. It simply means the total number of persons enumerated in the particular district. The actual number of persons enumerated in any district and born within the Province is shown in row 3 of Table XI, Part A. Provincial Table XI gives the birth-place of immigrants into various canal colonies according to caste, age and occupation; part I applies to the Lower Chenab Colony, II to the Lower Jhelum Colony and III to the Upper Bari Doab Colony. In addition to the Imperial and Provincial tables 7 subsidiary tables are printed as appendices to the present chapter.

Reference
to tables

Subsidiary Table I gives details of birth-place by natural divisions, that is to say, according to the grouping of districts and states into Indo-Gangetic Plain West, Himalayan, Sub-Himalayan and North-West Dry Area.

Subsidiary Table II gives a classification of emigration on the same basis of natural divisions.

Subsidiary Table III compares the figures of birth-place by natural divisions for 1911 with those of 1921 for both the Punjab and Delhi.

Subsidiary Table IV gives the details of migration between the Provinces of the Punjab and Delhi and the other parts of India, the other parts of India being named in alphabetical order under the classes British Territory and Federated States separately.

Subsidiary Table V gives the calculated number of persons travelling between districts of the Punjab during the decade 1911-1921 as determined solely from the Census figures of birth-place.

Subsidiary Table VI gives the details of persons enumerated outside the Punjab and Delhi. So far as the figures relate to persons enumerated in other parts of India, this table may be accepted as being as correct as any of the Punjab figures, but, as has been already noted, the figures are very incomplete in respect of countries outside India, and, in particular, of places in Europe and America.

Subsidiary Table VII is one specially prepared by Mr. Middleton to show the effect of what he calls the "balance of migration," which phrase Mr. Middleton defines as equal to the number of immigrants minus the number of emigrants. Actually as we have seen, the number of immigrants and emigrants to any particular district or State in the Punjab is not known to any great degree of approximation, and to use the crude figures of birth-place without any correction for the "circulation" nor for the effect of area and population seems to me likely to be a fertile source of fallacious inference.

Subsidiary Table VIII shows the birth-place of persons according to the Tahsil or State of enumeration.

Subsidiary Table IX gives the percentages based on Subsidiary Table VIII.

Mr. Middleton has further proposed two other functions which he calls "the co-efficient of migration" and "the effect of migration." The co-efficient of migration he defines as equal to immigrants minus emigrants divided by immigrants plus emigrants. "The effect of migration" he defines as the number of immigrants minus emigrants, divided by total population. Had Mr. Middleton remained to develop the ideas of which these functions were the synthesis, no doubt the results would have been of considerable interest.

I. Showing birth-place of persons enumerated in each district and State of the Punjab. II. Showing place of enumeration of persons born in each district or State of the Punjab. III. Showing birth-place by natural divisions. IV. Showing birth-place of—(a) persons enumerated in the Punjab and born in other Provinces and States in 1911 and 1921, commonly classed as immigrants, (b) persons born in the Punjab and enumerated in other Provinces and States in 1911 and 1921, commonly known as emigrants. V. Showing calculated number of persons passing annually from each district in the Punjab, to every other district in the Punjab. VI. Showing the details of emigrants enumerated outside the Punjab and Delhi. VII. Migration to the canal colonies, 1911 and 1921. VIII. Showing the birth-place of persons according to tahsil or State of enumeration. IX. Showing the percentages based on Subsidiary Table VIII.

SUBSIDIARY TABLE I.

Immigration (actual figures).

District, State and Natural Division where enumerated.	BORN IN (000'S OMITTED).																	
	District, State (or Natural Division).			Contiguous District or State in the Province.			Other parts of the Province.			Contiguous parts of other Provinces, &c.			Non-Contiguous parts of other Provinces, &c.			Outside India.		
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
PUNJAB	24,474	13,413	11,061							444	204	240	148	89	59	35	28	9
1. INDO-GANGETIC PLAIN WEST	10,599	5,935	4,664	432	210	222	38	25	13	287	111	176	83	54	29	8	7	1
1. Hissar ..	716	401	315	53	15	38	11	4	7	18	6	12	18	9	9	..	..	..
2. Loharu State ..	19	10	9	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Rohtak ..	677	393	284	55	12	43	6	2	4	22	6	16	12	4	8	..	..	..
4. Dujana State ..	19	12	7	5	1	4	1	..	1	..	..	..	1	..	1	..	..	..
5. Gurgaon ..	584	344	240	14	3	11	6	1	5	68	16	52	9	3	6	..	..	..
6. Patwadi State ..	12	8	4	4	1	3	..	..	..	..	..	..	1	..	1	..	..	..
7. Karnal ..	730	421	309	60	17	43	11	5	6	15	5	10	13	6	7	..	..	..
8. Jullundur ..	733	424	309	70	21	49	15	7	8	..	..	..	4	2	2	1	1	..
9. Kapurthala State ..	236	142	94	44	13	31	3	1	2	..	..	..	1	..	1	..	..	..
10. Ludhiana ..	475	285	190	78	26	52	9	5	4	..	..	..	5	3	2	..	..	..
11. Multan State ..	66	42	24	12	4	8	2	1	1	..	..	..	..	..	..	..	..	..
12. Ferozepore ..	891	506	385	135	61	74	17	11	6	28	16	12	23	15	8	1	1	..
13. Faridkot State ..	108	67	41	31	11	20	9	4	5	..	..	..	3	2	1	..	..	..
14. Patiala State ..	1,266	756	510	183	69	123	14	7	7	22	6	16	15	8	7	..	..	..
15. Jind State ..	232	145	87	61	19	42	5	2	3	..	..	..	10	4	6	..	..	..
16. Nabha State ..	200	129	71	49	13	36	4	2	2	7	1	6	3	2	1	..	..	..
17. Lahore ..	895	502	393	99	47	52	87	60	27	..	..	..	47	34	13	4	3	1
18. Amritsar ..	824	474	350	73	24	49	23	15	8	..	..	..	9	6	3	1	1	..
19. Gujranwala ..	543	308	235	63	30	33	10	5	5	..	..	..	7	5	2	..	..	..
20. Sheikhupura ..	315	177	138	87	46	42	113	66	47	..	..	..	7	6	2	1	1	..
2. HIMALAYAN	1,675	876	799	34	18	16	9	4	5	5	3	2	10	7	3	5	3	2
21. Nahan State ..	126	69	57	8	4	4	4	3	1	..	..	..	2	1	1	..	..	..
22. Simla ..	31	20	11	1	1	..	7	5	2	..	..	..	4	3	1	2	1	1
23. Simla Hill States ..	287	148	139	12	8	4	5	2	3	..	..	..	2	2	..	1	1	..
24. Bilaspur State ..	88	48	40	7	3	4	3	1	2	..	..	..	..	..	..	..	..	..
25. Kangra ..	732	378	354	27	11	16	2	1	1	1	1	..	2	1	1	2	1	1
26. Maneri State ..	175	90	85	7	4	3	2	..	2	..	..	..	..	..	..	..	..	..
27. Suket State ..	53	28	25	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
28. Chamba State ..	136	71	65	2	1	1	1	1	..	2	1	1	..	..	..	..	..	..
3. SUB-HIMALAYAN	5,477	2,935	2,492	189	71	118	33	18	15	78	39	39	49	29	20	13	10	8
29. Ambala ..	582	340	242	56	19	37	12	8	4	7	3	4	22	12	10	2	1	1
30. Kalsia State ..	38	25	13	15	6	9	2	1	1	..	..	..	2	1	1	..	..	..
31. Hoshiarpur ..	865	479	386	53	17	38	8	4	4	..	..	..	2	1	1	..	..	..
32. Gurdaspur ..	775	441	334	51	15	34	10	6	4	11	4	7	3	1	2	2	1	1
33. Sialkot ..	869	481	388	38	12	26	11	7	4	14	4	10	4	2	2	2	2	..
34. Gujrat ..	768	410	358	37	19	18	7	4	3	8	3	5	4	2	2	..	..	..
35. Jhelum ..	451	229	222	14	5	9	4	1	4	1	4	2	3	2	1	..	..	..
36. Rawalpindi ..	186	254	232	17	10	7	2	10	7	21	15	6	16	12	4	6	5	1
37. Attock ..	495	254	241	7	3	4	5	3	..	2	1	1	4	3	1	1	1	..
4. NORTH-WEST DRY AREA	5,374	2,914	2,460	173	98	75	441	259	182	38	22	16	42	27	15	9	6	3
38. Montgomery ..	558	301	257	65	36	29	79	48	31	..	..	..	10	7	3	2	1	1
39. Shahpur ..	637	347	290	49	26	23	28	15	13	..	..	..	5	3	2	1	1	..
40. Mianwali ..	343	180	163	4	2	3	2	1	1	2	1	1	5	4	1	1	1	..
41. Lyallpur ..	505	273	232	124	69	55	340	198	142	..	..	..	10	7	3	..	..	..
42. Jhang ..	549	293	256	13	7	6	6	4	2	..	..	..	1	1	..	..	..	..
43. Mullan ..	788	426	362	43	25	18	16	29	17	..	..	..	11	6	5	2	2	..
44. Bahawalpur State ..	697	381	316	31	19	12	23	13	10	22	13	9	8	4	4	..	..	..
45. Muzaffargarh ..	518	297	251	16	9	7	2	1	1	..	..	..	2	1	1	..	..	..
46. Dera Ghazi Khan ..	483	265	218	4	2	2	3	2	1	2	1	1	1	1	..	3	1	2
DELHI	303	178	125	..	..	..	..	..	..	66	29	37	116	72	44	3	3	..
INDO-GANGETIC PLAIN WEST	303	178	125	..	..	..	..	..	..	66	29	37	116	72	44	3	3	..
Delhi ..	303	178	125	..	..	..	..	..	..	66	29	37	116	72	44	3	3	..

SUBSIDIARY TABLE II.

Emigration (actual figures).

District, State and Natural Division where born.		ENUMERATED IN (000's OMITTED).																	
		District, State (or Natural Division).			Contiguous District or State in the Province.			Other parts of the Province.			Contiguous parts of other Provinces, &c.			Non-Contiguous parts of other Provinces, &c.			Outside India.		
		Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
PUNJAB	24,474	13,413	11,061	..	..	..	..	..	..	321	176	145	210	151	59	18	15	3
1. INDO-GANGETIC PLAIN WEST	10,599	5,935	4,664	462	233	229	44	27	17	152	56	96	104	79	25	..	..	..
1. Hissar	716	401	315	90	35	55	27	14	13	14	6	8	9	6	3	..	..	..
2. Loharu State	19	10	9	3	1	2	1	..	..	..	..	..	..	..	..	..	..	..
3. Rohtak	677	393	284	52	12	40	12	7	5	22	8	14	8	6	3	..	..	..
4. Dujana State	19	12	7	4	1	3	1	..	..	1	..	..	..	..	..	..	..	..
5. Gurgaon	584	344	240	21	4	17	20	10	10	55	17	38	6	5	1	..	..	..
6. Patauli State	12	8	4	2	..	2	1	1	..	..	..	..	..	..	..	..	..	..
7. Karnal	730	421	309	59	17	42	11	5	6	8	2	6	7	4	3	..	..	..
8. Jullundur	733	424	309	67	23	41	127	76	51	..	..	..	15	10	5	..	..	..
9. Kapurthala State	236	142	94	32	16	22	10	5	5	..	..	..	..	..	..	..	..	..
10. Ludhiana	475	285	190	67	25	41	58	22	16	..	..	..	7	6	1	..	..	..
11. Malerkotla State	66	42	24	8	3	5	8	2	6	..	..	..	..	..	..	..	..	..
12. Ferozepore	894	506	388	110	45	65	15	8	7	6	3	3	4	3	1	..	..	..
13. Faridkot State	108	67	41	21	7	14	4	2	2	..	..	..	..	..	..	..	..	..
14. Patiala State	1,266	756	510	183	58	125	21	11	10	9	1	8	11	8	3	..	..	..
15. Jind State	232	145	87	53	12	41	3	1	2	..	..	..	2	1	1	..	..	..
16. Nabha State	200	129	71	50	11	36	7	2	5	1	..	1	3	1	2	..	..	..
17. Lahore	895	502	393	91	45	46	23	12	11	..	..	..	32	22	10	..	..	..
18. Amritsar	824	474	350	104	44	60	91	51	37	..	..	..	26	19	7	..	..	..
19. Gujranwala	543	308	235	84	40	44	22	13	9	..	..	..	7	5	2	..	..	..
20. Sheikhupura	315	177	138	17	8	9	..	..	..	..	..	..	..	..	..	..	..	..
2. HIMALAYAN	1,675	876	799	28	10	18	21	13	8	4	2	2	9	7	2	..	..	..
21. Nahan State	126	69	57	2	1	1	1	..	1	..	..	..	1	1	..	..	..	..
22. Simla	31	20	11	4	1	3	6	4	2	..	..	..	4	3	1	..	..	..
23. Simla Hill States	287	148	139	3	1	2	8	3	5	..	..	..	1	1	..	..	..	..
24. Bilaspur State	88	48	40	4	1	3	2	1	1	..	..	..	..	..	..	..	..	..
25. Kangra	732	378	354	33	15	18	13	11	2	2	1	1	5	4	1	..	..	..
26. Mandi State	175	90	85	6	3	3	2	..	2	..	..	..	..	..	..	..	..	..
27. Suket State	53	28	25	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
28. Chamba State	136	71	65	8	4	4	1	1	..	..	..	..	..	..	..	..	..	..
3. SUB-HIMALAYAN	5,477	2,985	2,492	313	136	177	365	220	145	76	40	30	80	61	19	..	..	..
29. Ambala	582	340	242	77	30	47	32	19	13	3	1	2	15	10	5	..	..	..
30. Kalsia State	38	25	13	8	3	5	1	..	1	..	..	..	9	7	2	..	..	..
31. Hoshiarpur	865	479	386	79	28	51	95	61	34	..	..	..	..	..	..	..	..	..
32. Gurdaspur	775	441	334	56	17	39	82	49	33	13	6	7	9	6	3	..	..	..
33. Sialkot	869	484	385	70	29	41	152	89	63	19	8	11	11	8	3	..	..	..
34. Gujrat	768	416	358	42	20	22	38	24	14	7	1	1	18	15	3	..	..	..
35. Jhelum	451	229	222	38	21	17	16	11	5	2	1	1	18	14	4	..	..	..
36. Rawalpindi	486	254	232	7	3	4	15	16	5	5	1	1	18	14	4	..	..	..
37. Attock	495	254	241	12	7	5	6	4	2	8	6	2	1	2	2	..	..	..
4. NORTH-WEST DRY AREA	5,374	2,914	2,460	93	51	42	23	13	10	10	6	4	17	12	5	..	..	..
38. Montgomery	558	301	257	78	42	36	27	16	11	..	..	..	3	2	1	..	..	..
39. Shahpur	637	347	290	20	11	9	14	9	5	..	..	..	1	1	1	..	..	..
40. Mianwali	343	180	163	7	4	3	12	7	5	4	..	..	..	..	..	..	..	..
41. Lyallpur	505	273	232	37	19	18	16	9	7	..	..	..	..	..	..	..	..	..
42. Jhang	549	293	256	69	38	31	8	5	3	..	..	..	..	..	..	..	..	..
43. Multan	788	426	362	29	17	12	8	5	3	..	..	..	5	3	2	..	..	..
44. Bahawalpur State	697	381	316	10	5	5	16	6	4	3	1	1	2	1	1	..	..	..
45. Muzaffargarh	548	297	251	17	10	7	3	2	1	2	1	1	3	2	1	..	..	..
46. Dera Ghazi Khan	483	265	218	13	8	5	4	3	1	..	..	..	..	..	..	..	..	..
DELHI	803	178	125	..	..	..	..	..	..	30	7	23	39	23	16	..	..	..
INDO-GANGETIC PLAIN WEST	803	178	125	..	..	..	..	..	..	30	7	23	39	23	16	..	..	..
Delhi	303	178	125	..	..	..	..	..	..	30	7	23	39	23	16	..	..	..

SUBSIDIARY TABLE III.							
Migration between natural divisions (actual figures) compared with 1911.							
NATURAL DIVISION IN WHICH BORN.	NUMBER ENUMERATED (000'S OMITTED) IN NATURAL DIVISION.						
	Punjab.	Delhi.	Indo-Gangetic Plain West.		Hima- layan.	Sub-Hima- layan.	North- West Dry Area.
			Punjab.	Delhi.			
1	2	3	4	5	6	7	8
PUNJAB 1921	24,474	65	11,069	65	1,718	5,696	5,968
DELHI 1921	35	302	31	302	..	2	2
PUNJAB AND DELHI .. {	1921	24,501	367	11,100	1,718	5,701	5,990
	1911	23,522	..	10,615	..	1,703	5,547
Indo-Gangetic Plain West .. {	(Punjab) 1921	11,101	57	10,599	57	8	164
	(Delhi) 1921	31	302	31	302	..	2
Indo-Gangetic Plain West, Punjab and Delhi .. {	1921	11,140	359	10,630	359	8	166
	1911	10,737	..	10,217	..	8	171
Himalayan {	1921	1,724	2	18	2	1,675	30
	1911	1,707	..	16	..	1,658	31
Sub-Himalayan {	1921	6,154	5	363	5	35	5,477
	1911	6,114	..	331	..	37	5,445
North-West Dry Area .. {	1921	5,490	1	89	1	..	27
	1911	4,969	..	61	..	..	18

SUBSIDIARY TABLE IV.

Migration between the Provinces of the Punjab and Delhi and other parts of India—continued.

Province or State.	Immigrants to Punjab.	Immigrants to Delhi.	Immigrants to Punjab and Delhi.			Emigrants from Punjab.	Emigrants from Delhi.	Emigrants from Punjab and Delhi.			Excess (+) or deficiency (—) of migration over emigration.	
	1921.	1921.	1921.	1911.	Variation.	1921.	1921.	1921.	1911.	Variation.	1921.	1911.
1	2	3	4	5	6	7	8	9	10	11	12	13
DELHI	35,165	..	..	..	..	*64,810	..	..	..	..	..	..
1. British Territory ..	32,305	..	..	..	..	60,741	..	..	..	..	..	..
2. Punjab States ..	2,860	..	..	..	..	4,029	..	..	..	..	..	..
MADRAS	1,583	553	2,136	1,083	+1,053	625	216	841	874	-33	+1,295	+209
1. British Territory ..	1,508	553	2,061	1,044	+1,017	625	216	841	874	-33	+1,220	+170
2. Punjab States ..	75	..	75	39	+36	..	..	..	..	..	+75	+39
N.W.F. PROVINCE (DISTRICTS AND ADMINISTERED TERRITORIES).	34,252	616	34,868	35,080	-192	76,936	1,651	78,587	65,220	+13,367	-43,719	-30,160
1. British Territory ..	33,838	616	34,454	34,521	-67	76,131	1,651	77,782	63,501	+14,281	-43,328	-28,980
2. Punjab States ..	414	..	414	539	-125	805	..	805	1,440	-635	-391	-901
PUNJAB	..	60,781	..	..	..	..	35,165	..	..	..	..	..
1. British Territory ..	..	60,781	..	..	..	..	32,305	..	..	..	..	..
2. Punjab States ..	..	..	..	..	..	..	2,860	..	..	..	..	..
UNITED PROVINCES OF AGRA AND OUDH	192,689	74,140	266,829	218,390	+48,439	82,638	14,843	97,481	121,505	-24,024	+169,348	+96,885
1. British Territory ..	173,167	71,140	244,307	200,415	+46,892	77,761	14,843	92,604	115,702	-23,098	+154,703	+84,713
2. Punjab States ..	19,522	..	19,522	17,975	+1,547	4,877	..	4,877	5,803	-926	+14,645	+12,172
III.—FEUDATORY STATES.												
TOTAL	303,859	41,353	345,212	326,422	+18,790	*154,741	5,973	*160,714	171,404	-10,690	+180,469	+155,018
1. Punjab States ..	75,182	..	75,182	68,515	+6,667	19,074	..	19,074	25,044	-5,970	+56,108	+43,471
2. British Territory ..	228,677	41,353	269,030	257,907	+11,123	132,663	5,973	138,636	141,242	-2,576	+127,335	+116,665
ASSAM STATES	302	..	302	31	+271	90	1	91	522	-431	+211	-491
1. Punjab States ..	..	..	..	1	..	12	..	12	75	-63	-12	-74
2. British Territory ..	302	..	302	30	+272	78	1	79	427	-348	+223	-397
BALUCHISTAN AGENCY TRACTS.	20	..	20	42	-22	718	8	726	428	+298	-706	-886
1. Punjab States ..	..	..	..	12	-12	27	..	27	5	+22	-27	+7
2. British Territory ..	20	..	20	30	-10	691	8	699	423	+276	-679	-303
BARODA	97	22	119	225	-106	*745	159	*904	921	-17	-785	-696
1. Punjab States ..	13	..	13	47	-34	31	..	31	11	+20	-18	+39
2. British Territory ..	84	22	106	178	-72	136	159	295	910	-615	-189	-732
BENGAL STATES	..	..	..	32	-32	72	7	79	82	-3	-79	-50
1. Punjab States ..	..	..	..	4	-4	18	..	18	..	+18	-18	+4
2. British Territory ..	..	..	..	28	-28	54	7	61	55	+6	-61	-27
BIHAR AND ORISSA STATES.	6	1	7	44	-37	1,139	..	1,139	841	+298	-1,132	-797
1. Punjab States ..	..	..	..	..	..	133	..	133	45	+88	-133	-45
2. British Territory ..	6	1	7	44	-37	1,006	..	1,006	796	+210	-999	-752
BOMBAY STATES	485	217	702	711	-9	*1,862	287	*2,149	2,648	-500	-1,447	-1,938
1. Punjab States ..	41	..	41	145	-104	33	..	33	86	-53	+8	+59
2. British Territory ..	444	217	661	566	+95	367	287	654	832	-178	+7	-269
CENTRAL INDIA AGENCY	608	305	913	3,630	-2,717	5,420	1,054	6,474	8,282	-1,808	-5,561	-4,652
1. Punjab States ..	62	..	62	503	-441	208	..	208	423	-215	-146	+80
2. British Territory ..	546	305	851	3,127	-2,276	5,212	1,054	6,266	7,859	-1,593	-5,415	-4,732
CENTRAL PROVINCES STATES.	338	61	399	3	+396	1,971	89	2,060	1,245	+815	-1,661	-1,242
1. Punjab States ..	35	..	35	..	+35	89	..	89	396	-307	-54	-396
2. British Territory ..	303	61	364	3	+361	1,882	89	1,971	849	+1,122	-1,607	-846

SUBSIDIARY TABLE IV.

Migration between the Provinces of the Punjab and Delhi and other parts of India—continued.

Province or State.	Immigrants to Punjab.	Immigrants to Delhi.	Immigrants to Punjab and Delhi.			Emigrants from Punjab.	Emigrants from Delhi.	Emigrants from Punjab and Delhi.			Excess (+) or deficiency (—) of migration over emigration.	
	1921.	1921.	1921.	1911.	Variation.	1921.	1921.	1921.	1911.	Variation.	1921.	1911.
1	2	3	4	5	6	7	8	9	10	11	12	13
GWALIAH STATE ..	1,793	1,457	3,250			2,530	722	3,252			-2	
1. Punjab States ..	220		220			365		365			-145	
2. British Territory ..	1,573	1,457	3,030			2,165	722	2,887			143	
HYDERABAD ..	1,115	351	1,466	689	+777	*1,618	1,112	*2,730	4,869	-2,139	1,264	-4,180
1. Punjab States ..	142		142	123	+19	317		317	399	-82	-175	-276
2. British Territory ..	973	351	1,324	566	+758	155	1,112	1,567	2,219	-647	243	-1,848
KASHMIR ..	75,159	185	75,344	72,369	+2,975	*52,427		*52,427	59,707	-7,280	22,917	12,662
1. Punjab States ..	3,387		3,387	2,658	+729	631		631	1,297	-576	2,756	1,151
2. British Territory ..	71,772	185	71,957	69,711	+2,246	51,797		51,797	58,500	-6,733	20,190	11,211
MADRAS STATES INCLUDING COCHIN AND TRAVANCORE.	89	6	45	27	+18	*53		*53	43	+10	8	-16
1. Punjab States ..						2		2	1	+1	-2	-1
2. British Territory ..	39	6	45	27	+18	35		35	10	+25	+10	+17
COCHIN ..	33	3	36	2	+34	*7		*7	3	+4	+29	-1
1. Punjab States ..												
2. British Territory ..	33	3	36	2	+34						+36	+2
TRAVANCORE ..	6	3	9	19	10	*42		*42	39	+3	33	-20
1. Punjab States ..						2		2	1	+1	2	-1
2. British Territory ..	6	3	9	19	10	35		35	9	+26	-26	+10
MYSORE ..	258	48	304	273	+31	956	260	1,216	1,662	-446	-912	-1,389
1. Punjab States ..	3		3	14	-11	16		16	18	-2	13	-4
2. British Territory ..	255	46	301	259	+42	940	260	1,200	1,644	-444	-899	-1,385
N.-W. F. PROVINCE (AGENCIES AND TRIBAL AREAS).				211	-211	20,179	66	20,245	3,673	16,572	-20,245	-3,462
1. Punjab States ..				19	-19	403		403	321	+82	-403	-302
2. British Territory ..				192	-192	19,776	66	19,842	3,281	+16,561	-19,842	-3,089
PUNJAB STATES ..		4,029										
2. British Territory ..		4,029										
RAJPUTANA AGENCY ..	222,173	33,729	255,902	246,609	+9,293	63,387	2,137	65,524	85,526	-20,002	+190,378	161,083
1. Punjab States ..	70,814		70,814	61,422	+9,392	16,766		16,766	21,871	-5,105	154,048	142,551
2. British Territory ..	151,359	33,729	185,088	182,187	+2,901	46,621	2,137	48,758	62,671	-13,916	136,330	119,535
SIKKIM ..				3	3	*43		*43	147	104	-43	144
1. Punjab States ..									9	9		-1
2. British Territory ..				3	-3				138	138		136
UNITED PROVINCES STATES.	1,468	944	2,410	1,523	+887	1,531	71	1,602	807	+795	-808	+716
1. Punjab States ..	465		465	507	-102	23		23	177	-154	442	-396
2. British Territory ..	1,001	944	1,945	956	+989	1,508	71	1,579	630	+949	1,366	1,326
INDIA UNSPECIFIED ..	1,581	225	1,806	1,155	+651							
1. British Territory ..	1,554	225	1,779	1,140	+639							
2. Punjab States ..	27		27	15	+12							
FRENCH AND PORTUGUESE SETTLEMENTS.	145	43	188	100	+88							
1. Punjab States ..	14		14	27	-13							
2. British Territory ..	131	43	174	73	+101							

SUBSIDIARY TABLE IV.

Migration between the Provinces of the Punjab and Delhi and other parts of India—concluded.

† Exclude immigrants from Punjab to Delhi and vice versa. *Include 24,242 persons of Punjab unspecified as below :—				§ Exclude emigrants from Punjab to Delhi and vice versa. NOTE. The emigrants from Punjab States (A and B) who specified their birth places are as below :—			
Part II.		Part III.		Part II.		Part III.	
					Punjab States (A).	Punjab States (B).	
Bombay ..	21,228	Baroda ..	578				Punjab States (A).
Delhi ..	40	Bombay ..	1,462				Punjab States (B).
		Hyderabad ..	846	Ajmer-Merwara ..	550	Baluchistan ..	27
Total ..	21,268	Kashmir ..	29	Andamans and Nicobars ..	66	Baroda ..	12
		Madras ..	4	Baluchistan ..	5	Bengal ..	17
		Cochin ..	7	Bengal ..	961	Bihar and Orissa ..	26
		Travancore ..	5	Bihar and Orissa ..	101	Bombay ..	33
		Sikkim ..	43	Bombay ..	8	Central India Agency ..	5
				Burma ..	142	Central Provinces ..	87
				Central Provinces and Berar ..		Gwalior ..	365
		Total ..	2,974	N.-W. F. Province ..	415	Hyderabad ..	1
				United Provinces ..	805	Kashmir ..	316
					4,496	Travancore ..	631
				Total ..	1,217	Mysore ..	2
						N.-W. F. Province ..	3
						Rajputana ..	403
						United Provinces States ..	69
							16,697
						Total ..	23
							120
							18,910

SUBSIDIARY TABLE V.

Showing calculated annual number of persons travelling between districts in the Punjab in the Decade 1911—1921, as affecting the number of foreign born in each District, i.e., of persons who made the journey one way only.

Divisions.	Number.	Ambala Division.					Jullundur Division.					Lahore Division.					Rawalpindi Division.					Multan Division.											
		Hissar.	Rohatak.	Gurgaon.	Karnal.	Ambala.	Simla.	Kangra.	Hoshiarpur.	Jullundur.	Ludhiana.	Ferozepore.	Lahore.	Amritsar.	Gurdaspur.	Sialkot.	Gujranwala.	Sheikhupura.	Gujrat.	Rahpur.	Jhelum.	Rawalpindi.	Attock.	Mianwali.	Montgomery.	Lyalpur.	Thana.	Multan.	Muzaffargarh.	Dera Ghazi Khan.	Total.		
AMBALA DIVISION.	1	0	379	60	260	28	2	—	33	17	159	1,258	96	18	4	12	8	124	—	—	—	—	—	—	24	25	26	27	28	29	—	—	
	2	—	—	—	—	—	—	—	10	11	9	49	19	10	4	30	—	35	—	—	—	—	—	—	77	29	—	—	—	—	—	—	
	3	31	359	0	933	6	1	—	10	11	9	82	77	29	4	30	—	35	—	—	—	—	—	—	14	15	6	—	—	—	—	—	
	4	—	—	—	—	—	—	—	4	20	34	12	26	29	13	—	—	8	—	—	—	—	—	—	2	7	—	—	—	—	—	—	
	5	—	—	—	—	—	—	—	15	41	174	16	109	23	36	—	—	97	—	—	—	—	—	—	100	290	—	—	—	—	—	—	
	6	1	1	0	119	0	7	2	25	8	2	3	8	6	—	—	—	2	—	—	—	—	—	—	0	0	—	—	—	—	—	—	—
JULLUNDUR DIVISION.	7	0	—	—	—	—	—	0	273	26	11	23	259	72	104	0	2	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	1	—	—	—	—	—	—	0	896	106	23	460	134	126	—	—	992	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	—	—	—	—	—	—	15	692	0	225	199	345	66	8	—	1,400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	31	198	0	199	58	19	25	6	—	86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	11	—	—	—	—	—	—	—	7	127	367	0	58	122	12	—	—	193	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	12	—	—	—	—	—	—	—	—	42	18	167	—	445	70	—	—	2,216	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LAHORE DIVISION.	13	0	—	—	—	—	—	—	—	13	36	1	410	0	467	—	—	2,221	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	14	—	—	—	—	—	—	—	63	26	3	31	467	837	203	0	—	1,683	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	—	—	—	—	—	—	—	13	26	7	19	343	100	203	0	—	3,333	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	21	16	6	19	—	28	43	—	—	4,031	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	—	—	—	—	—	—	3	2	0	7	952	19	9	35	561	0	4,031	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	18	—	—	—	—	—	—	—	—	—	—	—	266	11	50	135	190	625	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RAWALPINDI DIVISION.	19	—	—	—	—	—	—	—	—	—	—	—	22	7	8	30	—	127	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	20	—	—	—	—	—	—	—	—	—	—	—	103	23	7	26	6	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—	58	33	17	38	—	808	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	—	—	—	—	—	—	—	—	—	—	29	6	3	12	11	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	23	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MULTAN DIVISION.	25	—	—	—	—	—	—	—	117	22	—	112	—	14	8	—	—	2,748	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	80	139	112	38	237	198	125	109	—	1,070	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	5	—	—	—	52	32	0	—	—	1,070	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	6	10	—	1	138	26	11	3	9	39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—	74	—	—	—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	23	—	—	—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total		95	1,409,105	1,413,544	82	148	1,372	1,681	1,293	2,359	4,770	2,357	1,504	608	837	21,690	3,072	503	59	1,331	142	181	10,242	5,225	410	3,652	66	156	67,332	—	—	—	—

SUBSIDIARY TABLE VI.

Showing the details of emigrants enumerated outside the Punjab and Delhi.

PROVINCE WHERE BORN.

Serial No.	PROVINCE WHERE ENUMERATED.	Punjab.			Delhi.		
		Persons.	Males.	Females.	Persons.	Males.	Females.
	1	2	3	4	5	6	7
	PROVINCES AND STATES IN INDIA BEYOND THE PROVINCE	466,089	295,173	170,916	34,010	18,187	15,823
	(A).—PROVINCES AND STATES ADJACENT TO THE PROVINCE	333,407	195,481	137,926	19,261	7,823	11,438
	(I).—BRITISH TERRITORY	195,165	128,740	66,425	16,979	6,608	10,371
1	Baluchistan	35,591	29,115	6,476	485	371	114
2	N.-W. F. Province (Districts and administered Territories)	76,936	56,344	20,592	1,051	1,569	82
3	U. P. of Agra and Oudh	82,638	43,281	39,357	14,843	4,668	10,175
	(II).—FEUDATORY STATES	138,242	66,741	71,501	2,282	1,215	1,067
4	Baluchistan States	718	502	216	8	6	2
5	N.-W. F. Province (Agencies and Tribal areas)	20,179	19,970	209	66	66	..
6	United Provinces States	1,531	1,180	351	71	45	26
7	Kashmir	52,427	23,420	29,007	..	..	..
8	Rajputana Agency	63,387	21,669	41,718	2,137	1,008	1,039
	(B).—OTHER PROVINCES AND STATES IN INDIA	132,682	99,692	32,990	14,749	10,364	4,385
	(I).—BRITISH TERRITORY	116,183	88,440	27,743	11,058	7,723	3,335
9	Ajmer-Merwara	4,028	2,935	1,093	2,241	1,541	700
10	Andamans and Nicobars	1,754	1,620	134	35	28	7
11	Assam	3,088	2,219	869	96	78	18
12	Bengal	15,754	12,027	3,727	1,882	1,099	783
13	Bihar and Orissa	6,718	4,842	1,876	541	387	154
14	Bombay Presidency	55,603	41,764	13,839	4,628	3,504	1,124
15	Burma	20,938	17,423	3,515	727	635	92
16	Central Provinces and Berar	7,674	5,270	2,404	692	361	331
17	Coorg	1	1	..	..	..	..
18	Madras Presidency	625	339	286	210	90	120
	(II).—FEUDATORY STATES	16,499	11,252	5,247	3,691	2,641	1,050
19	Assam States	90	70	20	1	1	..
20	Baroda State	746	557	188	159	118	41
21	Bengal States	72	34	38	7	6	1
22	Bihar and Orissa States	1,139	796	343	..	..	..
23	Bombay States	1,862	1,447	415	287	242	45
24	Central India Agency	5,420	3,475	1,945	1,054	656	398
25	Central Provinces States	1,971	1,321	650	89	53	36
26	Gwalior State	2,530	1,661	869	722	598	124
27	Hyderabad State	1,618	1,150	459	1,112	808	304
28	Madras States	4	2	2	..	..	..
29	Cochin State	7	5	2	..	..	..
30	Travancore State	42	24	18	..	..	..
31	Mysore State	956	678	278	260	159	101
32	Sikkim	43	23	20	..	..	..

SUBSIDIARY TABLE VI—concluded.

Showing the details of emigrants enumerated outside the Punjab and Delhi.

Serial No.	PROVINCE WHERE ENUMERATED.	PROVINCE WHERE BORN.					
		Punjab.			Delhi.		
		Persons.	Males.	Females.	Persons.	Males.	Females.
	1	2	3	4	5	6	7
	OTHER ASIATIC COUNTRIES	12,527	10,940	1,587	21	17	4
33	Ceylon	174	121	53	21	17	4
34	Cyprus	122	114	8	..	..	..
35	Hong-kong	1,192	1,038	154	..	..	..
36	Federated Malaya States	7,789	6,693	1,096	..	..	..
37	Unfederated Malaya States (Johore, Kedah, Kelantan, Trengganu and Brunei)	1,373	1,281	92	..	..	..
38	Straits Settlements	1,877	1,693	184	..	..	..
	AFRICA	5,511	4,501	1,010	2	2	..
39	Kenya	4,823	3,866	957	..	..	..
40	Nyasaland	20	17	3	..	..	..
41	Somaliland Protectorate	125	122	3	..	..	..
42	Southern Rhodesia	15	15	..	..	..	..
43	Sudan	16	16	..	..	..	..
44	Tonganika Territory	326	299	27	2	2	..
45	Union of South Africa	180	166	20	..	..	..
	AUSTRALASIA	449	405	44	..	..	..
46	Fiji	449	405	44	..	..	..
	Grand Total	484,576	311,019	173,557	34,033	18,206	15,827

NOTE—1,032 emigrants from the Punjab were reported as having embarked at Calcutta during the decade 1911-1920.

SUBSIDIARY TABLE VII.

Migration to the Canal Colonies, 1911 and 1921.

SUBSIDIARY TABLE VII.

Migration to the Canal Colonies, 1911 and 1921.

District.		BALANCE OF MIGRATION 1911.		District.		BALANCE OF MIGRATION 1921.		
		Lyalpur.	Shahpur.	Gujranwala.	Multan.	Montgomery.	Jhang.	All Colonies.
..	..	X	-3,312	-22,500	-8,294	-62,889	-29,180	-126,175
Lyalpur	..	3,312	X	-9,144	854	509	-16,104	-20,573
Shahpur	..	22,500	9,144	X	1,035	-1,513	537	31,703
Gujranwala	..	8,294	-564	-1,035	X	-1,131	-17,228	-11,977
Multan	..	62,889	-509	1,513	1,151	X	-186	64,858
Montgomery	..	29,180	16,104	-537	17,228	186	X	62,161
Jhang	..	..	..	..	..	..	..	..
Total	..	126,175	20,573	-31,706	11,977	-64,856	-62,161	0
..	..	71,128	28,865	30,363	1,957	1,271	893	134,507
Stalkot	..	69,754	5,849	10,864	4,263	2,564	313	93,607
Amritsar	..	63,696	1,854	7,512	1,237	600	319	75,218
Jullundur	..	42,965	1,610	9,924	2,066	697	282	57,544
Gurdaspur	..	15,633	26,871	12,503	1,010	427	683	57,127
Gujrat	..	38,061	1,653	6,100	1,659	567	270	48,310
Hoshiarpur	..	..	..	..	..	..	..	..
Ludhiana	..	27,461	1,610	447	265	301	86	30,176
Lahore	..	20,589	-113	-2,985	3,592	742	-334	21,481
Jhelum	..	3,205	13,212	79	1,896	246	490	19,128
Ambala	..	16,797	203	248	189	174	15	17,626
Ferozepore	..	9,404	543	148	278	-703	19	9,689
Mianwali	..	4,905	509	-99	575	307	316	6,513
Muzaffargarh	..	1,557	-295	-186	4,095	33	-905	4,299
Hissar	..	1,566	389	286	191	1,029	-2	3,459
Kangra	..	1,477	43	96	319	124	28	2,989
Rohatak	..	530	457	274	131	30	30	1,835
Gurgaon	..	344	264	294	164	599	13	1,678
Rawalpindi	..	2,229	41	-1,651	488	445	71	1,623
Karnal	..	416	711	101	81	242	23	1,574
D. G. Khan	..	120	-162	-107	1,320	275	21	1,547
Attock	..	493	-340	0	649	67	-45	914
Simla	..	44	-12	-11	43	13	-12	65
Total	..	392,374	83,762	74,272	26,498	10,433	2,664	590,003
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SUBSIDIARY TABLE VII.

Migration to the Canal Colonies, 1911 and 1921.

		CHANGE IN THE BALANCE OF MIGRATION, 1911 AND 1921.										DIFFERENCE IN BALANCE DUE TO MIGRATION OF DECADE									
		X	716	13,458	6,009	29,488	-2,045	47,686	Lyalpur	..	..	X	54	8,958	4,410	16,910	-7,881	22,451			
..	..	-716	X	7,183	2	1,830	9,031	17,330	Shahpur	..	..	-8,558	X	5,354	173	1,932	5,310	13,215			
..	..	-13,458	-7,183	X	-121	-20,682	-1,800	-43,244	Gujranwala	..	..	-5,354	87	-20,985	-1,932	-36,903	-1,932	-36,903			
..	..	-6,069	-2	121	X	3,085	-1,990	-4,463	Multan	..	..	-4,410	-173	-87	X	2,855	-5,046	-6,861			
..	..	-29,488	-1,830	20,682	-3,085	X	-2,540	-16,261	Montgomery	..	..	-16,910	-1,932	20,985	-2,855	X	-2,577	-3,289			
..	..	2,045	-9,031	1,800	1,900	2,540	X	-1,046	Jhang	..	..	7,881	-5,810	1,693	5,046	2,577	X	11,387			
Total	Total	-47,686	-17,330	43,244	4,463	16,261	1,046	0		Total		-22,451	-13,215	36,903	6,861	3,289	-11,387	0			
..	..	-4,172	-1,026	5,953	2,631	18,679	122	22,213	Jullundur	..	..	8,507	-649	7,455	2,898	18,799	186	37,256			
..	..	307	-901	3,181	357	10,455	165	13,634	Sialkot	..	..	88	-7,497	30,175	1,681	8,065	126	32,638			
..	..	-9,468	-663	5,795	-1,431	13,494	-339	7,358	Hoshiarpur	..	..	7,979	-570	4,401	689	10,368	219	23,286			
..	..	-14,138	-13,270	24,102	1,284	7,811	-53	5,736	Amritsar	..	..	-142	-2,403	12,124	3,099	5,199	-52	17,825			
..	..	-1,863	-614	1,006	1,782	4,371	68	4,754	Gurdaspur	..	..	-1,796	-130	7,512	2,153	7,050	-8	14,801			
..	..	-698	961	292	3,149	-24	598	4,278	Lahore	..	..	-5,350	-686	5,196	-713	13,642	-400	11,683			
..	..	-10,359	-472	5,327	1,780	6,911	-64	3,293	Ferozepore	..	..	18	-305	1,036	1,838	4,230	72	6,689			
..	..	-26	1,023	95	1,097	166	178	2,833	Jhelum	..	..	-107	3,430	855	146	1,716	88	6,131			
..	..	-748	788	839	-233	1,670	-10	2,390	Mianwali	..	..	-283	1,063	272	3,264	37	5,580				
..	..	-1,041	237	1,953	1,763	486	333	1,973	Ambala	..	..	2,367	3	608	596	806	-38	4,462			
..	..	-40	-332	1,171	47	539	5	1,390	Attock	..	..	73	955	95	1,227	179	487	3,016			
..	..	151	-531	532	390	543	-23	1,272	Muzaffargarh	..	..	-739	178	138	2,582	493	152	2,833			
..	..	-992	-38	618	538	831	-41	936	Hissar	..	..	273	-254	1,228	85	745	5	2,082			
..	..	-16	-231	919	592	-173	-11	817	Rawalpindi	..	..	897	-523	202	338	632	-9	1,597			
..	..	-43	-6	-40	-15	-1	-2	-107	Ludhiana	..	..	-1,106	-711	456	832	1,716	-6	1,181			
..	..	-24	-419	135	-5	-65	-39	-438	Gurgaon	..	..	56	-178	978	365	-53	-8	1,154			
..	..	-5	45	55	-844	19	4	-728	Rohatak	..	..	52	-328	190	21	18	-24	-71			
..	..	-127	-697	-28	90	7	14	-732	Shikoh	..	..	-21	-8	-42	-6	2	-4	-92			
..	..	-14,093	-3,573	9,651	2,246	4,688	-415	-896	D. G. Khan	..	..	19	11	50	-580	74	8	-418			
..	..	-1,251	-29	156	-290	25	2	-1,294	K. Thal	..	..	-44	-535	-8	115	55	19	-418			
..	..	-6,598	-1,033	567	770	1,656	-23	-4,822	Kerstia	..	..	-950	-20	179	-136	50	187	-875			
..	..	-1,935	-24,020	666	58	1,950	50	-26,311	Gujrat	..	..	-1,828	-18,646	3,107	240	29,55	187	-14,882			
Total	Total	-60,902	-44,797	61,439	15,334	74,658	1,128	57,451		Total		8,573	-25,943	76,287	20,831	76,141	1,633	1,55455			

SUBSIDIARY TABLE VIII.

Showing the Birth-place of persons according to Tahsil or State of Enumeration.

District.	TAHSIL.	Number of persons enumerated in Tahsil.	PERSONS BORN IN			
			District of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States in the Punjab.	Outside the Punjab.
1	2	3	4	5	6	7
HISSAR.	PUNJAB	25,101,060	*21,580,442	..	..	637,137
	BRITISH TERRITORY	20,685,024	*17,850,279	..	..	532,323
	Hissar	136,272	123,019	3,656	1,885	6,812
	Hansi	177,043	159,899	12,357	2,146	2,641
	Bhiwani	125,015	105,020	10,062	2,147	8,186
	Fatehabad	195,801	173,473	14,738	2,636	4,954
	Sirsa	181,679	153,232	12,142	2,326	13,979
	Total	816,810	716,143	52,955	11,140	36,572
	Rohtak	200,939	178,786	12,502	1,440	8,211
	Jhajjar	213,866	184,729	18,436	2,855	7,846
ROHTAK.	Gohana	175,291	154,215	16,691	729	3,656
	Sonapat	182,176	159,572	7,073	548	14,983
	Total	772,272	677,302	54,702	5,572	34,696
GURGAON.	Gurgaon	111,980	96,543	4,939	1,203	9,295
	Ferozepur Jhirka	98,285	82,913	97	106	15,169
	Nuh	112,119	102,937	520	116	8,546
	Palwal	131,760	110,308	246	453	20,763
	Rowari	147,256	121,231	8,329	4,213	13,483
	Ballabgarh	80,603	69,758	239	176	10,430
	Total	682,003	583,690	14,370	6,267	77,676
KARNAL.	Karnal	232,607	213,050	5,443	2,072	12,042
	Panipat	173,796	149,658	15,102	1,237	7,799
	Kaithal	275,722	242,717	23,287	5,991	3,727
	Thanesar	146,601	124,750	16,326	1,435	4,090
	Total	828,726	730,175	60,158	10,735	27,658
AMBALA.	Ambala	187,926	143,604	19,597	7,078	17,647
	Kharar	142,894	123,117	13,706	2,425	3,646
	Jagadhri	126,704	109,230	8,655	651	8,168
	Naraingarh	107,798	102,108	4,533	283	874
	Rupar	116,155	103,504	10,788	1,384	479
	Total	681,477	581,563	57,279	11,821	30,814
SIMLA.	Simla	35,003	21,440	1,050	6,117	6,396
	Kot Khai	10,324	9,976	10	237	101
	Total	45,327	31,416	1,060	6,354	6,497
KANGRA.	Kangra	118,374	112,738	3,559	608	1,469
	Dehra	124,638	119,259	4,564	319	496
	Hamirpur	168,504	160,926	6,579	551	448
	Nurpur	95,470	86,656	7,570	351	884
	Palampur	137,052	134,699	2,032	160	161
	Kulu	122,027	117,367	3,232	331	1,097
	Total	766,065	731,645	27,545	2,320	4,555
HOSHIA- PUR.	Hoshiarpur	247,196	230,762	12,964	2,708	762
	Dasuya	215,000	201,015	12,784	1,505	206
	Garhsankar	232,772	215,136	15,629	1,528	479
	Una	231,851	218,425	11,394	1,562	470
	Total	927,419	865,338	52,771	7,393	1,917
JULLUNDUR.	Jullundur	289,396	248,385	28,760	8,241	4,010
	Nakodar	190,650	177,353	10,886	2,183	228
	Phillaur	164,800	153,485	9,051	1,974	296
	Nawashahr	177,692	163,604	21,355	2,249	484
	Total	822,544	732,827	70,052	14,647	5,018

* These figures represent persons born in the districts where they were enumerated.

SUBSIDIARY TABLE VIII—continued.

Showing the Birth-places of persons according to Tahsil or State of Enumeration.

District.	TAHSIL.			Number of persons enumerated in Tahsil.	PERSONS BORN IN			
					District of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States in the Punjab.	Outside the Punjab.
1	2			3	4	5	6	7
LUDHIANA.	Ludhiana	..	..	285,953	238,946	37,992	5,744	3,271
	Jagraon	..	..	164,553	140,383	20,267	2,533	1,370
	Samrala	..	..	117,116	95,651	19,412	1,291	759
	Total	..	..	567,622	474,980	77,671	9,571	5,400
FEROZPORE.	Ferozopore	..	..	221,737	173,380	20,708	8,060	10,589
	Zira	..	..	166,373	152,399	12,934	817	223
	Moga	..	..	209,558	180,372	25,238	2,598	1,350
	Muktsar	..	..	209,645	174,999	25,406	3,152	6,028
	Fazilka	..	..	290,935	212,100	41,876	3,143	33,816
	Total	..	..	1,098,248	893,250	135,222	17,770	52,006
LAHORE.	Lahore	..	..	515,613	355,473	45,205	72,600	42,215
	Chunian	..	..	295,509	260,870	25,364	6,123	3,152
	Kasur	..	..	320,214	278,636	28,720	7,900	4,958
	Total	..	..	1,131,336	894,979	99,349	86,683	50,325
AMRITSAR.	Amritsar	..	..	450,760	390,607	35,167	17,264	7,722
	Tarn Taran	..	..	294,465	267,716	20,993	4,562	1,194
	Ajvala	..	..	181,149	165,237	16,919	1,481	512
	Total	..	..	926,374	823,560	73,079	23,307	9,428
GURDASPUR.	Gurdaspur	..	..	234,146	222,169	7,592	3,065	1,320
	Batala	..	..	275,695	215,995	23,511	4,685	1,504
	Pathankot	..	..	129,592	110,752	9,579	1,506	7,065
	Shakargarh	..	..	212,819	195,700	10,186	935	6,028
	Total	..	..	852,192	774,616	50,868	10,191	16,517
SIALKOT.	Sialkot	..	..	200,469	263,998	6,887	5,093	14,491
	Pasrur	..	..	140,788	135,906	3,270	1,047	565
	Zafarwal	..	..	158,936	148,940	5,691	938	3,367
	Raya	..	..	196,936	182,351	11,616	2,382	587
	Daska	..	..	150,694	138,377	10,241	1,316	769
	Total	..	..	937,823	869,572	37,705	10,776	19,770
GUJRANWALA.	Gujranwala	..	..	294,567	249,838	35,176	5,744	3,809
	Wazirabad	..	..	146,248	124,536	17,369	2,184	2,159
	Haflizabad	..	..	182,766	168,563	10,991	2,909	1,203
	Total	..	..	623,581	542,937	63,536	9,937	7,171
SHEIKHUPURA.	Khangah Dogran	..	..	267,674	148,829	53,454	61,938	3,453
	Sharakpur	..	..	255,461	165,065	33,550	51,299	4,647
	Total	..	..	523,135	314,794	87,004	113,237	8,100
GUJRAT.	Gujrat	..	..	295,551	283,983	6,460	1,772	3,336
	Kharian	..	..	250,201	240,883	3,811	1,020	4,487
	Phalia	..	..	278,294	242,894	27,395	3,656	4,349
	Total	..	..	824,046	767,760	37,666	6,448	12,172
SHAHPUR.	Shahpur	..	..	137,899	132,877	3,232	1,174	616
	Khushab	..	..	168,718	164,383	3,273	453	609
	Bhalwal	..	..	220,951	180,388	27,839	5,494	1,230
	Sargodha	..	..	192,350	152,960	14,839	21,280	3,271
	Total	..	..	719,918	636,608	49,183	28,401	5,726

SUBSIDIARY TABLE VIII—continued.

Showing the Birth-place of persons according to Tahsil or State of Enumeration.

District.	Tahsil.	Number of persons enumerat- ed in Tahsil.	PERSONS BORN IN			
			District of enumeration.	Contiguous Districts and States.	Non-contiguous Districts and States in the Punjab.	Outside the Punjab.
1	2	3	4	5	6	7
JHELM.	Jhelum	173,122	157,247	7,410	3,200	5,265
	Pind Dadan Khan	143,338	137,450	3,640	1,236	1,012
	Chakwal	160,608	156,509	2,970	376	753
	Total	477,068	451,206	14,020	4,812	7,030
RAWAL- PINDI.	Rawalpindi	262,056	195,076	11,055	21,671	34,254
	Gujar Khan	148,837	140,511	4,510	1,111	2,675
	Murree	60,969	56,662	153	612	3,542
	Kahuta	96,762	94,047	215	142	2,358
	Total	569,224	486,326	16,533	23,536	42,829
ATTOCK.	Attock	173,472	163,415	2,129	2,390	5,538
	Pindigheb	120,097	118,456	752	237	652
	Talagang	108,501	106,227	2,053	108	113
	Fatehjang*	110,179	107,321	2,223	138	497
	Total	512,249	495,419	7,157	2,873	6,800
MIAN- WALI.	Mianwali	147,553	140,650	2,295	1,705	2,903
	Bhakkar	147,121	142,858	1,191	434	2,638
	Isa Khel	63,531	59,879	320	755	2,568
	Total	358,205	343,387	3,815	2,894	8,109
MONT- GOMERY.	Montgomery	222,675	135,284	27,007	53,623	6,761
	Okara	148,716	106,524	20,904	18,098	3,130
	Dipalpur	200,978	183,535	12,139	4,517	787
	Pakpattan	141,417	132,640	5,173	2,673	931
	Total	713,786	557,983	65,283	78,911	11,609
LYALLPUR.	Lyallpur	314,852	180,808	30,580	129,834	3,630
	Samundri	224,806	134,813	30,530	58,207	1,256
	Toba Tek Singh	232,426	104,250	30,201	95,088	2,887
	Jaranwala	177,379	85,103	32,842	56,666	2,768
	Total	979,463	504,974	124,153	339,795	10,541
JHANG.	Jhang	232,570	227,500	3,062	1,487	581
	Chiniot	211,188	201,930	5,754	2,749	755
	Shorkot	126,801	119,811	3,826	2,455	709
	Total	570,559	549,241	12,582	6,691	2,045
MULTAN.	Multan	243,385	214,998	6,471	14,170	7,746
	Shujabad	132,091	129,037	1,922	583	849
	Lodhran	125,353	123,066	1,165	472	650
	Mailsi	113,927	108,821	3,230	806	1,070
	Khanewal	127,131	83,754	4,428	26,455	2,494
MUZAF- FARGARH.	Kabirwala	118,377	128,352	15,824	3,700	441
	Total	890,264	788,028	43,040	46,246	12,950
	Muzaffargarh	178,579	170,919	6,115	879	666
	Alipur	146,711	141,711	3,848	494	658
DERA GHAZI KHAN.	Sanawan	108,970	100,240	2,237	202	291
	Leiah	134,218	128,995	4,124	178	921
	Total	568,478	547,865	16,324	1,753	2,536
	Dera Ghazi Khan	193,789	186,763	1,055	2,635	3,336
DERA GHAZI KHAN.	Sanghar	84,759	82,241	604	35	1,879
	Rajanpur	105,008	102,300	1,841	385	392
	Jampur	85,496	84,658	407	183	248
	Biloch transfrontier tract	26,758	26,643	..	114	1
	Total	495,810	482,695	3,907	3,352	5,856

SUBSIDIARY TABLE VIII--concluded.

Showing the Birth-place of persons according to Tahsil or State of Enumeration.

STATE.	Number of persons enumerated in State.	PERSONS BORN IN			
		State of enumeration.	Contiguous Districts or States.	Non-Contiguous Districts or States in the Punjab.	Outside the Punjab.
1	2	3	4	5	6
PUNJAB STATES	4,416,036	*3,730,163	..	..	104,814
Dujana	25,833	19,032	4,755	1,233	813
Pataudi	18,097	12,363	3,509	611	1,614
Kalsia	57,371	38,581	11,666	2,204	1,920
Bashahr	90,366	85,172	1,772	331	91
Nalagarh	46,868	42,168	3,710	953	37
Keonthal	47,455	21,867	23,290	814	1,481
Baghal	25,099	23,551	1,128	383	31
Jubbul	25,752	22,258	2,861	210	393
Other Sim'a Hill States	71,178	62,618	5,788	2,113	659
Loharu	20,621	19,060	591	275	692
Nahan	140,118	125,898	8,080	3,988	2,482
Bilaspur	98,000	88,621	7,534	2,393	52
Mandi	185,048	175,183	7,321	1,300	914
Suket	54,328	52,736	1,048	463	81
Kapurthala	284,275	235,794	43,596	3,963	1,012
Malerkotla	80,322	65,624	12,427	1,898	373
Faridkot	150,661	108,169	31,439	8,069	2,984
Chamba	111,867	136,683	1,779	848	2,557
Patiala	1,499,739	1,265,822	183,780	13,277	36,860
Jind	308,183	232,389	60,515	5,585	9,694
Nabha	263,334	199,780	48,732	4,895	9,927
Bahawalpur	781,191	697,181	31,164	22,735	30,111

* These figures represent persons born in the states where they were enumerated.

SUBSIDIARY TABLE IX.

Showing the percentages based on Subsidiary Table VIII.

District.	TAHSIL.	Number of persons enumerated in Tahsil.	PERSONS BORN IN				District.	TAHSIL.	Number of persons enumerated in Tahsil.	PERSONS BORN IN				
			District of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States.	Outside the Punjab.				District of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States.	Outside the Punjab.	
1	2	3	4	5	6	7	1	2	3	4	5	6	7	
HISSAR.	PUNJAB ..	..	85.9	..	..	2.5	HOSHIARPUR.	Hoshiarpur ..	..	100	93.35	5.24	1.10	.31
	BRITISH TERRITORY ..	..	86.3	..	..	2.5		Dasuya ..	..	100	93.23	5.93	.74	.10
	Hissar ..	100	91.94	2.68	1.38	5.00		Garhshankar ..	..	100	92.42	6.71	.66	.21
	Hansi ..	100	91.32	6.98	1.21	1.49		Una ..	..	100	94.21	4.92	.67	.20
	Bhiwani ..	100	83.82	7.98	1.70	6.50		Total ..	100	93.31	5.69	.80	.20	
	Fatehabad ..	100	88.60	7.52	1.35	2.53		Jullundur ..	..	100	85.83	9.04	2.84	1.30
	Sirsa ..	100	81.31	6.68	1.28	7.70		Nakodar ..	..	100	93.03	5.72	1.14	.11
	Total ..	100	87.68	6.48	1.36	4.48	JULLUNDUR.	Phillaur ..	..	100	93.13	5.49	1.26	.18
ROHTAK.	Rohtak ..	100	88.97	6.22	.72	4.09		Nawashahr ..	..	100	86.44	12.02	1.27	.27
	Jhajjar ..	100	86.38	8.62	1.33	3.67		Total ..	100	89.09	8.52	1.78	.61	
	Gohana ..	100	87.98	9.52	.42	2.08		Ludhiana ..	..	100	83.56	13.29	2.01	1.14
	Sonepat ..	100	87.59	3.88	.30	8.23	Jagraon ..	..	100	85.31	12.32	1.54	.83	
	Total ..	100	87.70	7.09	.72	4.49	LUDHIANA.	Samrala ..	..	100	81.67	16.58	1.11	.64
GURGAON.	Gurgaon ..	100	86.22	4.41	1.07	8.30		Total ..	100	83.68	13.68	1.69	.95	
	Ferozepur-Jhirka ..	100	81.36	.10	.11	15.43		FEROZEPUR.	Ferozepore	100	78.19	13.40	3.63	4.78
	Nuh ..	100	91.81	.47	.10	7.62	Zira ..		..	100	91.60	7.78	.49	.18
	Palwal ..	100	83.72	.19	.34	15.75	Moga ..		..	100	86.07	12.04	1.25	.64
	Rewari ..	100	82.33	5.65	2.86	9.16	Muktsar ..		..	100	83.47	12.15	1.60	2.88
	Ballaigarh ..	100	86.55	.30	.21	12.94	Fazilka ..		..	100	72.90	14.40	1.08	11.62
	Total ..	100	85.58	2.11	.92	11.39	Total ..		100	81.33	12.31	1.62	4.74	
KARNAL.	Karnal ..	100	91.59	2.34	.89	5.18	LAHORE.	Lahore ..	..	100	68.94	8.78	14.09	8.19
	Panipat ..	100	86.11	8.69	.71	4.49		Chunian ..	..	100	88.28	8.58	2.07	1.07
	Kaithal ..	100	88.03	8.15	2.17	1.35		Kasur ..	..	100	87.02	8.97	2.47	1.54
	Thanesar ..	100	85.10	11.14	.98	2.78		Total ..	100	79.11	8.78	7.66	4.45	
	Total ..	100	88.11	7.26	1.30	3.33	AMRITSAR.	Amritsar ..	..	100	86.66	7.80	3.83	1.71
AMBALA.	Ambala ..	100	76.42	10.43	3.76	9.39		Tarn Taran ..	..	100	90.92	7.13	1.55	.40
	Kharar ..	100	86.16	9.59	1.70	2.55		Ajnala ..	..	100	89.73	9.19	.80	.28
	Jagadhri ..	100	86.21	6.83	.51	6.45		Total ..	100	88.61	7.86	2.51	1.02	
	Naraingarh ..	100	91.72	4.21	.26	.81		GURDASPUR.	Gurdaspur	100	91.89	3.24	1.31	.56
	Rupar ..	100	89.11	9.29	1.19	.41	Batala ..		..	100	89.23	8.53	1.70	.54
	Total ..	100	85.34	8.41	1.73	4.52	Pathankot ..		..	100	85.52	7.40	1.16	5.92
SIMLA.	Simla ..	100	61.25	3.00	17.48	18.27	Shakargarh ..		..	100	91.94	4.79	.44	2.83
	Kot Khai ..	100	96.63	.10	2.29	.98	Total ..		100	90.90	5.97	1.19	1.94	
	Total ..	100	69.31	2.34	14.02	14.33	SIALKOT.	Sialkot ..	..	100	90.89	2.37	1.75	4.99
KANGRA.	Kangra ..	100	95.25	3.00	.51	1.24		Pasrur ..	..	100	96.53	2.32	.75	.40
	Dehra ..	100	95.68	3.66	.26	.40		Zafarwal ..	..	100	93.71	3.58	.59	2.12
	Hamirpur ..	100	95.50	3.90	.33	.27		Raya ..	..	100	92.61	5.89	1.21	.29
	Nurpur ..	100	90.77	7.94	.37	.92		Daska ..	..	100	91.83	6.80	.87	.50
	Palampur ..	100	98.28	1.48	.12	.12		Total ..	100	92.72	4.02	1.15	2.11	
	Kulu ..	100	96.18	2.65	.27	.90								
	Total ..	100	95.51	3.60	.80	.59								

SUBSIDIARY TABLE IX.

Showing the percentages based on Subsidiary Table VIII.

District.	TAHSIL.	Number of persons enumerated in Tahsil.	PERSONS BORN IN				District.	TAHSIL.	Number of persons enumerated in Tahsil.	PERSONS BORN IN			
			District of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States in the Punjab.	Outside the Punjab.				District of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States in the Punjab.	Outside the Punjab.
1	2	3	4	5	6	7	1	2	3	4	5	6	7
GUJRANWALA.	Gujranwala	100	81.82	11.91	1.95	1.29	MUJAWALI.	Mianwali	100	95.32	1.56	1.15	1.97
	Wazirabad	100	85.15	11.88	1.49	1.48		Blakkar	100	97.10	.81	.30	1.79
	Hafizabad	100	92.23	6.01	1.10	.60		Isa Khel	100	91.25	.52	1.19	4.04
	Total	100	87.07	10.19	1.59	1.15		Total	100	95.56	1.07	.81	2.26
SHEIKHUPURA.	Khangah Dogran	100	55.60	19.97	23.14	1.29	MONTGOMERY.	Montgomery	100	60.75	12.13	21.08	3.04
	Sharakpur	100	61.97	13.13	20.08	1.82		Okara	100	71.63	14.10	12.17	2.10
	Total	100	60.17	16.63	21.65	1.55		Dipalpur	100	91.32	6.01	2.25	.39
								Pakpattan	100	93.79	3.66	1.89	.66
								Total	100	78.17	9.15	11.05	1.63
GUJRAT.	Gujrat	100	96.09	2.18	.60	1.13	LYALLPUR.	Lyallpur	100	52.43	8.87	37.65	1.05
	Kharian	100	96.28	1.52	.11	1.79		Samundri	100	59.97	13.58	25.89	.56
	Phalia	100	87.28	9.85	1.31	1.56		Toba Tek Singh	100	44.85	13.00	40.91	1.24
	Total	100	93.17	4.57	.78	1.48		Jaranwala	100	47.98	18.51	31.95	1.56
								Total	100	51.56	12.68	31.69	1.07
SHAHPUR.	Shahpur	100	96.36	2.34	.85	.15	JHANG.	Jhang	100	97.82	1.29	.61	.25
	Khushab	100	97.43	1.91	.27	.36		Chiniot	100	95.62	2.72	1.30	.36
	Bhalwal	100	81.36	12.60	2.49	.55		Shorkot	100	91.49	3.02	1.93	.56
	Sargodha	100	79.52	7.72	11.06	1.70		Total	100	96.26	2.21	1.17	.36
	Total	100	88.43	6.83	3.94	.80							
JHELM.	Jhelum	100	90.83	4.28	1.85	3.04	MULTAN.	Multan	100	88.34	2.66	5.82	3.18
	Pind Dadan Khan	100	95.89	2.54	.86	.71		Shujabad	100	97.69	1.45	.44	.42
	Chakwal	100	97.45	1.85	.23	.17		Lodhran	100	98.17	.93	.38	.52
	Total	100	94.58	2.94	1.01	1.47		Mailsi	100	95.52	2.84	.70	.94
								Khanewal	100	65.88	11.35	20.81	1.90
RAWALPINDI.	Rawalpindi	100	74.27	4.44	8.25	13.04	MUZAFFARGARH.	Kabirwala	100	86.50	10.97	2.53	.30
	Gujar Khan	100	94.42	3.03	.75	1.80		Total	100	88.52	4.83	5.19	1.46
	Murree	100	92.04	.25	1.00	5.81		Muzaffargarh	100	95.71	3.43	.49	.37
	Kahuta	100	97.19	.22	.15	2.44		Ahipur	100	96.59	2.62	.34	.15
	Total	100	85.44	2.90	4.14	7.52		Sanawan	100	97.19	2.05	.19	.27
ATTOCK.	Attock *	100	94.20	1.23	1.38	3.19	DERA GHAZI KHAN.	Leiah	100	96.11	3.07	.13	.69
	Pindigheb	100	98.63	.63	.20	.51		Total	100	96.37	2.87	.31	.45
	Talagang	100	97.91	1.89	.10	.10		Dera Ghazi Khan	100	96.38	.54	1.36	1.72
	Fatehjang	100	97.41	2.02	.12	.45		Sanghar	100	97.03	.71	.04	2.22
								Rajanpur	100	97.51	1.75	.37	.37
								Jampur	100	99.02	.48	.21	.29
								Biloch transfrontier tract	100	99.57	..	.43	..
	Total	100	96.71	1.40	.56	1.33		Total	100	97.35	.79	.68	1.18

SUBSIDIARY TABLE IX.

Showing the percentages based on Subsidiary Table VIII.

STATE.	Number of persons enumerated in State.	PERSONS BORN IN				STATE.	Number of persons enumerated in State.	PERSONS BORN IN			
		State of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States in the Punjab.	Outside the Punjab.			State of enumeration.	Contiguous Districts or States.	Non-contiguous Districts or States in the Punjab.	Outside the Punjab.
1	2	3	4	5	6	1	2	3	4	5	6
PUNJAB STATES ..	..	84.5	..	..	2.4						
Dujana ..	.. 100	73.67	18.41	4.77	3.15	Bilaspur ..	.. 100	89.82	7.69	2.44	.05
Pataudi ..	.. 100	68.31	19.39	3.38	8.92	Mandi ..	.. 100	94.83	3.90	.70	.51
Kalsia ..	.. 100	67.25	25.56	3.84	3.35	Suket ..	.. 100	97.07	1.93	.85	.15
Bashahr ..	.. 100	94.25	5.28	.37	.1	Kapurthala ..	.. 100	82.91	15.34	1.39	.36
Nalagarh ..	.. 100	89.97	7.92	2.03	.08	Malerkotla ..	.. 100	81.70	15.47	2.36	.47
Keonthal ..	.. 100	46.08	49.08	1.71	3.13	Faridkot ..	.. 100	71.80	20.87	5.35	1.98
Baghal ..	.. 100	93.84	4.49	1.53	.14	Chamba ..	.. 100	96.35	1.25	.60	1.80
Jubbai ..	.. 100	86.43	11.11	.93	1.53	Patiala ..	.. 100	84.40	12.25	.89	2.46
Other Simla Hill States ..	.. 100	87.97	8.13	2.97	.93	Jind ..	.. 100	75.41	19.64	1.81	3.14
Loharu ..	.. 100	92.43	2.88	1.33	3.36	Nabha ..	.. 100	75.86	18.51	1.86	3.77
Nahan ..	.. 100	89.64	5.75	2.84	1.77	Bahawalpur ..	.. 100	89.25	3.99	2.91	3.85

CHAPTER IV.

Religion.

SECTION I.—GENERAL DISTRIBUTION BY RELIGIONS AND MEANING OF FIGURES.

75. Reference to statistics. 76. Meaning of figures. 77. General distribution of population by religions.
78. Local distribution. 79. Variation general.

SECTION II.—MUSALMANS.

80. Meaning of Islam. 81. Essentials of Islam. 82. Local distribution. 83. Variation. 84. The growth of sects in Islam. 85. Classification of the entries of sects. 86. Strength of sects. 87. Variation in sects.

SECTION III.—HINDUS.

88. Meaning of the term "Hindu". 89. Definition of Hinduism. 90. Definition adopted for Census purposes. 91. Local distribution. 92. Variation. 93. The growth of Hindu sects. 94. The strength of sects. 95. Variation in sects. 96. Aryas. 97. Brahmos. 98. Devsamaj.

SECTION IV.—SIKHS.

99. Meaning of the term "Sikh". 100. Local distribution. 101. Variation. 102. The growth of Sikh sects. 103. Strength of sects. 104. Variation in sects.

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105. Local distribution. 106. Variation. 107. Strength of sects. 108. Variation in sects.

SECTION VI.—MINOR RELIGIONS.

109. Jains. 110. Buddhists. 111. Parsis. 112. Jews. 113. Indefinite beliefs.

Section I.—General Distribution by Religions and Meaning of Figures.

75. The numerical strength of each religion returned is given in Imperial Table VI for each district and State. Imperial Table XV gives the Christian population by sect and race, and Imperial Table XVI which is divided into two parts, the age distribution of Europeans and Allied races and Anglo-Indians. Reference to Statistics.

In addition to these tables, Table VI-A, printed in Part III as an appendix to the Imperial Table VI, contains details of sects of Hindus, Musalmans, Jains and Sikhs. The distribution of the population of tahsils by principal religions is shown in Provincial Table II.

At the end of this chapter will be found the following subsidiary tables in which the most prominent features of the statistics are exhibited by means of proportionate and comparative figures :

Subsidiary Table I.—General distribution of the population by religions.

Subsidiary Table II.—Distribution by districts of the main religions.

Subsidiary Table III.—Christians, Number and Variation.

Subsidiary Table IV.—Religion of Urban and Rural population.

76. In 1911 the instructions issued to enumerators for filling in column 4 (a) of the census schedule required that the religion to which a person claimed to belong must be accepted, and in view of the unwillingness of large number of Jains and Sikhs to be classed separately from Hindus, permission was given to record such persons as Jain-Hindus or Sikh-Hindus. The same instructions were repeated at the present census with the modification that the use of the terms Jain-Hindu and Sikh-Hindu was to be avoided as far as possible. Jainism is indigenous to India, but its tenets are totally different from those of Hinduism, while Sikhism is a religion with a very distinct worship of its own, and having attained a position of independence is fully entitled to rank as a separate religion. Thus, at the present census it was intended to ascertain the true number of Jains and Sikhs, which could not be done if some of them were returned under the general head "Hindus." In the case of the depressed classes, such as Chuhars, Sansis, etc., it was laid down that they should be returned as Hindus if they did not profess to belong to any recognised religion, and the scruples of Hindu enumerators in returning Chuhars as Hindus, or the claims of Chuhars to be registered as belonging to a separate religion, were not allowed to override these instructions. 30,073 persons belonging to these classes were entered under the name of their caste or tribe, and they were treated as Hindus in the course of tabulation. The detail will be found on the title page of Table VI. No alteration was made in the significance of the terms denoting other religions, except that persons recorded under "Indefinite beliefs" were excluded from "Christians" and shown under a separate heading "Others" in Table VI. Meaning of Figures.

General
distribution
of population
by religions.

77. The marginal table shows the general strength of the different religions which make up the total population of both the provinces of the Punjab and Delhi. The Musalmans, Hindus and Sikhs taken together constitute nearly 98 per cent. of the population, Musalmans alone contributing more than 50 per cent. Of the remaining 2 per cent., the number of Christians

Religion.	Actual number.	Number per mille of the total population.
Musalmans	12,955,141	506
Hindus	9,125,202	357
Sikhs	3,110,060	121
Christians	346,259	13
Jains	46,019	2
Buddhist	5,918	1
Parsi	598	
Jews	36	
Indefinite beliefs	15	
Total	25,589,248	1,000

is greater than all the minor religions put together.

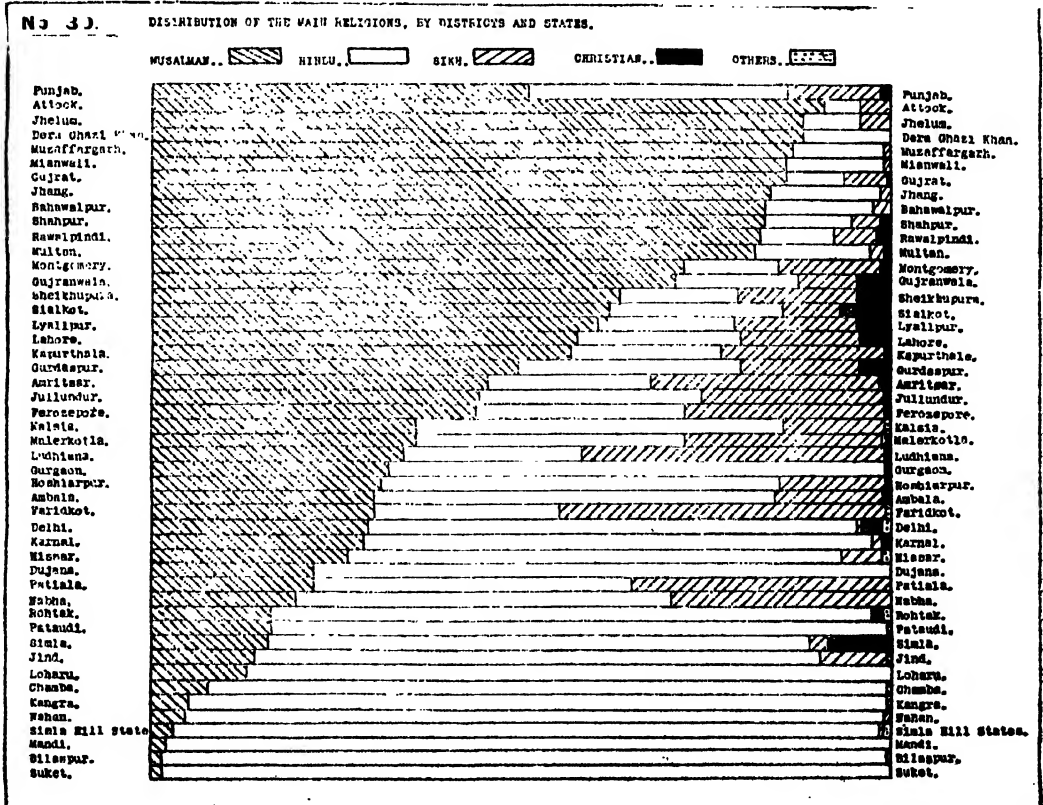
Local distribution.

78. The religious distribution of the people by natural divisions is shown in the margin. Musalmans preponderate in the North-West Dry Area and their proportion is smallest in the Himalayan Division. Hindus on the other hand abound in the Indo-Gangetic Plain West but are weakest in the North-West Dry Area. Sikhs and Christians are strongest in the Indo-Gangetic Plain West, while Buddhists appear only in the Himalayan Tract.

Natural Divisions.	PER 10,000.					
	Musalmans	Hindus	Sikhs	Christians	Jains	Buddhists
Indo-Gangetic Plain						
West	1,756	1,978	856	60	15	..
Himalayan	30	612	3	2	..	2
Sub-Himalayan	1,402	608	223	46	3	..
North-West Dry Area	1,875	338	134	27	..	..

The relative strength of the main religions in each natural division has been worked out in Subsidiary Table II. Its examination shows that in the Indo-Gangetic Plain West the Hindus outnumber the Musalmans, and the Sikhs are less than half the latter in number. In the Himalayan Division Hindus form the major portion of the population, and the number of the followers of other religions is insignificant. In the Sub-Himalayan Area Musalmans are more numerous than Hindus and form 61 per cent. of the population, the number of Hindus and Sikhs being 27 and 10 per cent. respectively. The North-West Dry Area is mainly populated by Musalmans; Hindus, Sikhs and Jains taken together being 21 per cent. of the population.

The diagram No. 30 illustrates the distribution of the main religions by districts and States. The length of the strips opposite each unit indicates the total population, and the different shades the proportionate strength of the religions followed.



The local distribution will be considered in detail under each religion.

79. The inset table compares the strength of each religion *per mille* of the

Religion.	Proportion per mill.		Variation per cent. in population since 1911.
	1911.	1921.	
Muslimans	508	506	+5.5
Hindus	363	357	+4.0
Sikhs	119	121	+7.9
Christians	8	13	+73.3
Jains	2	2	-1.6
Buddhists	..	..	-23.0
Parsis	..	..	-8.4
Jews	..	..	33.3

total population with the rate of variation per cent. since 1911. It will be observed that though there has been an increase of 5.7 per cent. in the population of both the provinces, the growth and decline of the different religions has been very uneven. The growth of Christians and fall in the number of Jews stand conspicuous. Among the principal religions the increase per cent. in Sikhs is a healthy sign of future expansion. The special causes influencing the variation in the case of each

Variation General.

religion will be discussed in the following paragraphs.

Section II—Muslimans.

80. The word "Islam" literally means (1) peace, (2) the way to achieve peace, and (3) submission. The word in its religious sense signifies complete submission to the will of God. "Islam" in its popular sense is the name by which the religion preached by the Holy Prophet Mohammed, who appeared in Arabia over thirteen hundred years ago, is known.

Meaning of Islam.

81. The basic principles of Islam are not contained in the *Kalima* only, as remarked in the Punjab Census Report 1911, but in the seven articles of faith enumerated in the following quotation :—

Essentials of Islam.

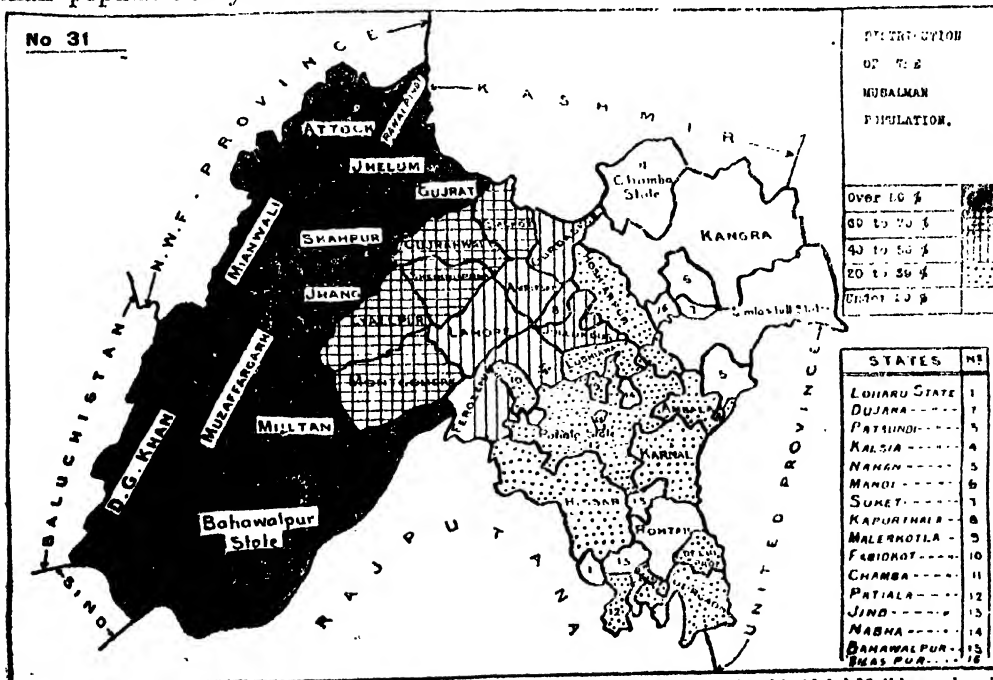
"Amanto billahe wa malakatihī wa kutubihī wa rusolehī wal yaumil akhirī walqadri khairehī wa sharrehī minallāhī tuālā wal baas baadal mawt."

First of all every Muslim must believe in (1) Allah, (2) angels, (3) revealed books, (4) divine messengers, (5) the last day of judgment, (6) the measurement of good and evil by God and (7) the life after death. It must be noted however that these seven cardinals, the rejection of any of which would be fatal to one's belief in Islam, do not partake of the character of a dogma. They are, on the contrary, the aggregate of those verities which furnish the motive power of a Muslim life in which he translates these principles into action.*

The whole Muslim world after accepting these cardinal principles of Islam, accepts the Holy Quran as the repository of the law recapitulating every law revealed to Mohammad and to the prophets who preceded him. To make one a practical Muslim requires the belief in and practice of the five "pillars" of Islam, namely, (1) declaration of faith in the oneness of God and divine messengership of Mohammad, (2) prayers, (3) alms-giving and poor-rate (*zakat*), (4) fasting, and (5) pilgrimage to the holy shrines of Mecca. These are briefly the main principles of Islam.

82. The map printed below indicates the relative distribution of the Muslim population by districts and States. Of 12,955,141 Muslimans scattered

Local distribution.



* In all these questions relating to Eastern religions, my Personal Assistant, Sheikh Abdul Majid, speaks with much greater authority than I could, and I have left entirely to him the exposition of the Islamic position and faith.

throughout the provinces, more than three-fifths belong to the Sub-Himalayan Division and North-West Dry Area, as shown in the Subsidiary Table I. The Musalmans muster strong in the Attock district, where they form 91 per cent. of the population. They contribute 88 per cent. each to Jhelum and Dera Ghazi Khan. In the remaining districts of the Western Punjab their proportion ranges between 82 and 86 per cent. Generally speaking the Western Punjab is the stronghold of Musalmans and their proportion decreases as we cross the Punjab from the West in an East-South-Easterly direction. The supremacy of Islam in this tract is due to this part being exposed to the raids of foreigners. The Musalman invaders generally came from the North and West, and seem to have left their indelible mark on the religious constitution of this tract. In the Central districts the relative strength varies from 80 to 40 per cent. The number of Musalmans in the Himalayan Division is 77,425, which is barely 5 per cent. of the population of that tract. The lowest percentage is reached in Kangra (5 per cent.) in British Territory, and in Suket (1 per cent.) in the Punjab States.

Variation.

Decade.		Number of Musalmans in every 10,000 of population.	RATE OF VARIATION PER CENT. IN	
			Musal-mans.	Total population.
1881	..	4,758	..	..
1891	..	4,739	+0.7	+10.1
1901	..	4,922	+12.5	+6.3
1911	..	5,075	+1.8	-2.2
1921	..	5,063	+5.5	+5.7

in the marginal statement with the rate of variation per cent. in the total population during the past four decades. It will be seen that the figures display a steady development in the number of Musalmans since 1881, notwithstanding disturbing causes such as plague and malaria, which inhibited the natural growth of population in the decade preceding 1911.

In the decade under review though there is no appreciable difference in the two sets of the rate of variation so far as provincial figures are concerned, yet the proportion of Musalmans to the total population presents a slight decrease when compared with the 1911 figures.* A closer examination of the variation during the past ten years in all natural divisions, worked out in the statement below, shows that Musalmans have not increased as rapidly as the total population in the North-West Dry Area where they are largely concentrated. It seems that they suffered more than their share from the vicissitudes of the decade in this area, and this accounts for the loss suffered by Musalmans in their proportion to the total population.

NATURAL DIVISIONS.	MUSALMANS (ACTUAL NUMBER).		INCREASE PER CENT. IN DECADE.	
	1911.	1921.	Musal-mans.	Total population.
Indo-Gangetic Plain West ..	4,144,971	4,491,944	8.4	7.2
Himalayan ..	74,205	77,425	4.3	.8
Sub-Himalayan ..	3,551,989	3,587,240	1.0	.7
North-West Dry Area ..	4,504,312	4,798,520	6.5	9.4

This decline in the proportion of Musalmans is further explained if we compare the increase in the relative strength of the different religions in the Western Punjab where the population is essentially Musalman. An extract from Subsidiary Table IV is reproduced below for reference.

District or State.	NUMBER PER 10,000 OF THE POPULATION WHO ARE					
	Musalman.		Hindu.		Chri-tian.	
	1911.	1921.	1911.	1921.	1911.	1921.
Attock ..	9,088	9,091	380	511	14	11
Rawalpindi ..	8,362	8,257	884	1,005	152	163
Jhelum ..	8,840	8,866	670	730	9	9
Montgomery ..	7,467	7,188	1,248	1,328	11	140
Shahpur ..	8,330	8,280	1,058	1,142	125	156
Mianwali ..	8,787	8,623	1,064	1,284	5	10
Lyallpur ..	6,113	6,074	1,803	1,853	374	429
Jhang ..	8,195	8,332	1,424	1,496	4	8
Multan ..	8,167	8,218	1,554	1,505	30	67
Bahawalpur ..	8,381	8,285	1,403	1,467	3	4
Muzaffargarh ..	8,691	9,679	1,197	1,229	1	6
Dera Ghazi Khan ..	8,906	8,834	1,072	1,140	1	1

* We have to remember that the percentage of Musalmans has fallen from 50.8 to 50.6 per cent., during the decade, and that this difference is less than the 1 per cent. of error which may be attributed to the census figures.

The examination of the above extract makes it clear that Musalmans have not advanced as rapidly as the followers of other religions. The causes of this slow progress are different in the case of each district. In the Dera Ghazi Khan and Muzaffargarh districts where the population is predominantly Musalman, the influenza epidemic exacted a heavy toll. The mortality from this disease was appalling in the rural areas of these districts which are entirely populated by Musalmans.

District or State.	Number of Musalman Chuhra and Musallis.	
	1911.	1921.
Rawalpindi ..	8,609	8,558
Jhelum ..	18,931	14,145
Shahpur ..	56,785	59,419
Mianwali ..	10,274	8,704
Bahawalpur ..	23,538	16,293

In other districts, leaving out Montgomery and Lyallpur, in which the foreign element as the result of migration (discussed in para. 40 of Chapter I) is largely responsible for the decrease in the proportion of Musalmans, it can be safely concluded from the figures noted in the margin that Chuhra, who in 1911 were recorded as Musalmans, have now been absorbed into Christianity or Hinduism either by conversion or on account of the new classification adopted at the present census.

84. The birth of sects in Islam dates back to the death of the holy Prophet, when the dispute on the question of his successorship gave rise to strong differences of opinion among the followers of Islam. Abu Bakar was the first Caliph, then Umar, then Usman, and Ali was the fourth. But there was a section of Musalmans who opined that Ali was the only rightful successor to the Prophet. Thus two divisions sprang up among Musalmans holding divergent views on this point. Those who sided with Ali were styled Shias and the rest Sunnis. The growth of sects in Islam.

There have been four great Jurists in Islam on the Sunni side Abu Hanifah, Shafai, Malak, and Ahmad Hanbal. They have written beautiful books on the subject, basing their arguments on the Holy Quran and the Prophet's traditions. Every Muslim has a perfect right to follow any one of them or to make his own judgment on the things concerned, in the light of the traditions of the Prophet. Those who are guided by the traditions of the Prophet are called Traditionalists or Ahl-i-Hadis, and the schools of those which accept the teaching of particular jurists are named after them. But all these schools of thought never differ from each other in matters which constitute the basic principles of Islam.

Again, every century in Islam saw men of great piety and learning. The magnetism of their devotion to Islam and their self-abnegation told powerfully upon their contemporaries, and they gathered round themselves groups of pupils and admirers. They represent the esoteric side of Islam. The admirers of these saintly personages followed their teachings, and every subsequent generation has regarded them with respect. These admirers were sometimes named after these Muslim saints such as Qadris, Chishtis, Naqshbandis, Sohrawardis, and Ahmadis. Those great divines enriched Islamic literature with their learned expositions of Islam, but they never preached anything inconsistent with the fundamental tenets of Islam. They all respect each other; they may differ in their explanation of certain events of a historic or of an academic nature mentioned in the Quran, but their mutual respect is all the same, the reason being that there can be no two opinions in the essential matters that constitute Islam. This brief description shows that the so-called sects of Islam are not sects in the received sense of the word, and the basic structure of the Faith, notwithstanding all minor divergences, remains unshaken.

85. The method adopted at the present census for classification of the entries of Musalman sects in the census returns, was practically the same as in 1911. The sects returned have been grouped in Table VI (Appendix Part III) under three main heads, viz., (1) Shias, (2) Sunnis, and (3) Reformers. A small number of entries which did not appear to fall under either of these heads has been shown separately under the head "Sects analogous to other religions." Classification of entries of sects.

86. The provincial figures for the sects are detailed in the margin. Nearly ninety-seven per cent. of the Musalman population in both the Punjab and Delhi Provinces is Sunni, and of the rest more than two-thirds

Sect.	Punjab.	Delhi.	Sect.	Punjab.	Delhi.
Shias ..	256,629	2,722	Reformers ..	89,532	355
Sunnis ..	12,466,791	138,681	Ahl-i-Quran ..	320	3
Hindis ..	381	15	Ahmadi ..	28,816	35
Miscellaneous ..	5,630	..	Ahl-i-Hadis ..	60,327	317
Qadri ..	30	..	Mawahid ..	63	..
Shafi ..	271	..	Sects analogous to ..	..	..
Unspecified ..	12,460,509	138,666	other religions ..	431	..

returned themselves as Shias. Among the minor sects the number of Ahl-i-Hadis heads the list. The figures in the head "Miscellaneous" under Sunnis are very small and the reason appears to be in the effort on the part of the enumerators to return main sects only.

Variation
in sects.

87. The figures for the main sects of the Punjab and Delhi combined are

Sects.	1911.	1921.	Increase or decrease per cent.
All Sects ..	12,275,477	12,955,141	+5.5
Sunnis ..	11,968,758	12,605,472	+5.3
Shias ..	247,532	259,351	+4.8
Ahl-i-Hadis ..	39,083	60,644	+55.5
Ahmadi ..	18,695	28,851	+54.3
Sects analogous to other religions ..	20,104	823	-95.8

compared in the margin for the two censuses of 1911 and 1921. It will be noticed that the increase in Sunnis and Shias has been more or less proportional to the increase in the total population of Musalmans, but the number of Ahl-i-Hadis and Ahmadias are more than half as much again than in 1911. The increase in the number of Ahl-i-Hadis, which is a sub-sect of Sunnis, shows that they are now no longer reluctant, as noticed

in 1911, to express their views publicly, and the prejudices against the followers of this school of thought are gradually disappearing. The additions to the ranks of Ahmadias is due to the propaganda work earnestly pursued by the two sections of the community (stationed at Lahore and Qadian) into which it was divided on the death of Maulvi Hakim Nur-ud-Din, an able successor of the original founder of the movement. In 1908, when the founder died, the community had one high school at Qadian, a Theological School, two vernacular newspapers, and an English Monthly "The Review of Religions." The community has during the past decade extended the scope of its activities by starting missions in Europe and America. Production of religious literature by both the sections has done much in drawing men to their side. Two new schools have recently been opened by the Lahore section at Lahore and Baddo-Malli in the Sialkot district. The small number of entries returned under the "Sects analogous to other religions" shows a tendency on the part of the local converts to record themselves under one or the other of the established sects.

Section III.—Hindus.

Meaning
of the term
Hindu.

88. The derivation of the term Hindu is fully discussed in para. 127 of the Punjab Census Report 1911. The term was originally invented by the early Musalman invaders to designate the people living east of the Indus, but its use has in the course of centuries been widely extended so as to cover all inhabitants of India who believe in the old faith.

Definition
of Hinduism.

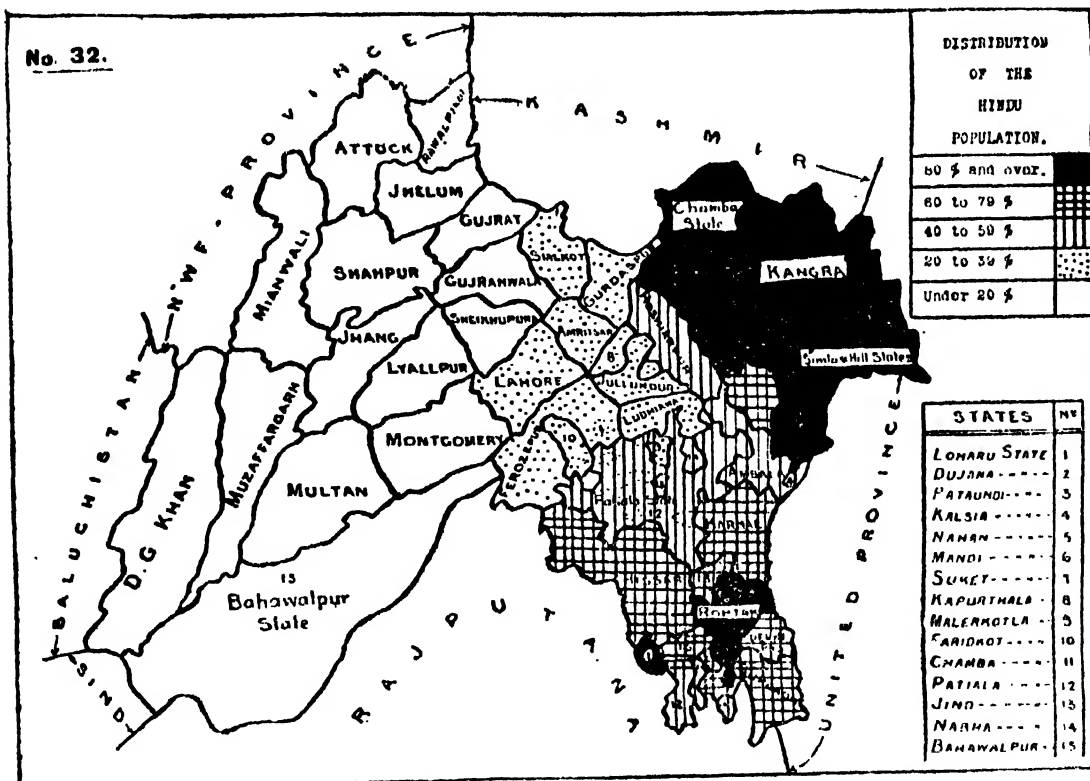
89. An attempt was made at the last census to evolve a complete definition of Hinduism and reports were called from the provincial Superintendents as to the application of certain tests prescribed by the Census Commissioner for the purpose of determining a criterion which might be taken to separate the pure Hindu from the low castes, which have adopted some or other form of Hinduism; but the result was an extraordinary divergence of opinion. The views expressed differed, according as Hinduism was considered to connote a religious, a racial, or a social organisation. It was found to include within its pale persons of various beliefs and shades of thought from the orthodox Brahman, down to the sweepers and members of other low castes, who are supposed to cause pollution by touch, and are not allowed access to Hindu temples. The term is indeed comprehensive enough, as remarked by the Census Commissioner in 1911, to include a complex congeries of creeds and doctrines. There are, however, two salient features of the Hindu religion which, generally speaking, distinguish Hindus from the followers of other religions, *viz.*, (1) religious or economic objection to the slaughter of cows, (2) acknowledgment of the supremacy of Brahmans. There are certain sectarian groups who disown the supremacy of Brahmans,* but their number is very small compared with those who still hold the Brahmans to be spiritually and socially above ordinary human beings.

*According to Rai Bahadur Pandit Hari Kishen Kaul (Chapter IV, para. 132 (a) of the Census Report of 1911) the acknowledgment of the supremacy of Brahmans, whose claims to superiority are based on birth alone, is made by lower Hindu castes only.

Taking the religious and social aspect of Hinduism into consideration, we can say that in order that a person may be called a Hindu, he should be a native of India and not of foreign descent, acknowledge the supremacy of Brahmans, or, at least, refuse to kill or harm kine, and belong to a recognised Hindu caste.

90. The census returns comprise Hindus of various beliefs and diverse races who may or may not be considered Hindus according to many orthodox votaries of the ancient religion. The sole criterion adopted for the purposes of the census was to treat every person as a Hindu who did not profess to belong to any recognised religion such as Islam, Christianity, etc. The definition is defective in the sense that it brings within the pale of Hinduism all members of the depressed classes who do not conform to the doctrines of any particular religion. In the matter of their customs and usages these classes are usually governed by the religions prevailing in the locality where they are found. It is a well-known fact that Chuhras and Chamars have no objection to eating beef in villages where the Muslim element reigns supreme, but not so in Hindu tracts. The formal adoption of the Hindu religion by these low castes does not improve their social status. They are looked down on by their Hindu neighbours. No Brahman ministers to them. They are not allowed to enter Hindu places of worship, and they are supposed to cause contamination by touch. The definition of the term Hindu might be improved if we admit a third class of castes, comprising "untouchables" who are in the transitional stage, and show them as professing no specified religion.

91. The inset map illustrates the local distribution of Hindus, who constitute more than one-third of the population of the provinces. Local distribution.



The most distinctively Hindu districts belong to the Himalayan Division, where Hindus amount to 94 per cent. of the population. Hindus represent a majority, 60 to 79 per cent. of the population, in the Delhi Province and in the districts and States of the Southern Punjab, the percentage rising in the Rohtak district to 82 per cent. In the central districts and States of the Punjab their number varies between 20 to 40 per cent. The proportion of Hindus steadily diminishes as we proceed westward, and the minimum 5 per cent., is reached in the Attock district.

Variation.

92. The statement in the margin shows the relative strength of Hindus

Census.	Population in every 10,000.	Variation per cent. of the total Hindu population during the decade.
1881 ..	4,384	..
1891 ..	4,408	+10·7
1901 ..	4,179	+2·7
1911 ..	3,628	-15·2
1921 ..	3,566	+4·0

in every ten thousand of the population of the provinces at the last five censuses, and gives the rate of variation per cent. during each decade. The number of Hindus has increased since 1911 by 4 per cent., but their proportion has declined from 3,628 to 3,566 per 10,000, which means that they have not advanced as rapidly as the followers of other religions. The explanation of this comparative stagnation during the past decade is found chiefly in the small

	Variation per cent. since 1911.
Indo-Gangetic Plain West	+7·2
Himalayan ..	+8
Sub-Himalayan ..	+·7
North-West Dry Area ..	+9·4

percentage of increase exhibited by the Himalayan and Sub-Himalayan Divisions which contain more than half of the Hindu population. The figures are given in the margin. The other causes which seem to have hampered the growth of Hindus are : (1) conversion of large number of Chuhras to Christianity, (2) the separation of Sikhs from the ranks of Hindus, (3) the effects of influenza on the districts of Gurgaon and Rohtak, both mainly Hindu, and, possibly, (4) the evil effects of child marriage and enforced widowhood.

The Chuhras have always been considered as the chief disturbing element

Religion.	Actual number of Chuhras, Musallis and Mazhabis.		(+) increase -) decrease.
	1911.	1921.	
Hindu ..	789,915	708,686	-81,229
Musalman ..	393,718	374,945	-18,773
Sikh ..	73,160	106,709	+33,549

in the return of religions in the Punjab on account of the flexibility of their religion. Special instructions were issued at the present census to return all Chuhras who did not profess Christianity or Islam as Hindus but in spite of these precautions, the figures in the margin show that Hindus have lost 81,229 Chuhras. Chuhras are found throughout the provinces and there is no reason to believe that they did not multiply, *pari passu*, with the rest of the population. Taking the increase (5·7 per cent.) shown by the

population at large, into account, the net calculated loss suffered by Hindus in Chuhras amounts to 90,704 persons. The above loss seems to be due partly to real conversions to Christianity, which shows an abnormal increase in the number of its Indian followers, and partly to the registration of Chuhras as Mazhabi Sikhs. There is no sharp line of distinction between Sikhism and Hinduism, and it was due to this that in 1911, 44,000 persons described themselves as Sikh-Hindus. The change in the political atmosphere of the Punjab during the past decade has led Sikhs to separate themselves from the ranks of Hindus with the result that very few persons returned themselves as Sikh-Hindus at the present census. It seems probable that many Sikhs who were classed as Hindus at the former census have returned themselves as Sikhs at the present one. Again, the districts of Gurgaon and Rohtak suffered heavily from the ravages of the influenza epidemic in 1918. The death rate from influenza in these districts was estimated as 123 and 96 *per mille*, respectively. The percentage of Hindus to the total population in Rohtak and Gurgaon is 82 and 67 respectively. It is also sometimes argued that the prevalence of early marriage and enforced widowhood have made the Hindus less prolific than other communities, but the evidence for such belief requires careful sifting. The growth of the Hindu population has been largest in the North-West Dry Area (9·4 per cent.) which contains a large proportion of Musalmans, while the Himalayan Division which is exclusively Hindu shows a ·7 per cent., increase only, though both the areas were affected more or less equally by influenza and recruitment for the great war.

In this connection I am indebted to Mr. H. L. O. Garrett, I. E. S., who, during a part of the war was stationed as Recruiting Officer in Ludhiana, a central Sikh district, for some interesting observations. Mr. Garrett writes :—

"My experience during 1917 and 1918 in Ludhiana and the adjacent territories was that there were a large number of families of the Hindu Zamindar class of which those members who had enlisted in the Army had, as a matter of course, become Sikhs. Those who in the ordinary course of events would have stayed at home did not do so. When, as a result of the intensive recruiting at the later stages of the war, the latter were induced to join up, they too became Sikhs. This developed into any ordinary Hindu of the zamindar class being taken by Sikh Recruiting Officers on condition of his becoming a Sikh. I have no figures by me but I know from memory that it was almost a daily occurrence for—say—Ram Chand to enter our office and leave it as Ram Singh—Sikh recruit. So much so that the local Hindu Recruiting Committee protested that their returns were being adversely affected. It would be worth while enquiring from other ex-Recruiting Officers whether such was their experience, but my colleague, Mr. Crump, and myself often commented on the matter and both agreed that the Sikh returns at the next census would be affected by it. It would further be interesting to ascertain how far these converts have relapsed after their brief period of military service. Conversion on other than military grounds just before the war was not common. I have seen allusions, quoted in the Introduction to my new Edition of Cunningham's History of the Sikhs, to the apathy of the Khalsa on the subject."

93. It has been stated that Hinduism includes monotheists, polytheists and pantheists. The explanation to this variety of religious beliefs and social practices is generally based on the theory that the ancestors of Hindus were immigrants from Central Asia, and that Hinduism, which was originally a pure and simple creed, has had to compromise with the Animism of the population, amongst whom it spread by accepting several of its godlings and superstitions. The explanation, however, loses some force on account of the probable absence of any organised missionary activity, among the Hindus, at the early stage of their history. Moreover, compromise implies selection and rejection and the existence of some agency entrusted with the duty of the selection. As a fact, however, we find that Hinduism has exercised very little selection, and that it practically covers all the beliefs and customs which prevail amongst the tribe who are included within its pale. Again, the very theory which forms the basis of this line of argument has been doubted by a learned Indian Scholar*, who has shown that there is no expression in the Vedas reminiscent of a foreign homeland, such as is likely to be met with in the literature of an immigrant race. According to this authority the higher forms of Hinduism are evolved from the lower ones, rather than other way about. This argument is now generally accepted by educated Hindus and affords an explanation of the origin of certain social customs. If this view is accepted Hinduism will have developed on rather unusual lines. In other religions the line of evolution seems to have been from polytheism to monotheism, but in Hinduism it was probably from polytheism to the higher pantheism.

The growth of Hindu sects.

It is very difficult to trace the growth of sects in Hinduism. As pointed out above it has no settled creeds which are obligatory on every Hindu. It does not prescribe any uniform standard for the innumerable sects and castes which bear its name. However, there are three ways of salvation recognised by the Hindu religious philosophers, namely, the way of knowledge, the way of faith and the way of service, and the two broad divisions into which Hindus can be divided seem to have sprung up from the difference in the relative importance to be attached to these three ways. The followers of the great Philosopher Sankaracharya maintain, that the Supreme Being is the only Reality and that the phenomenal universe is *Mâyâ*, and that salvation comes only from the realisation of this fact. They give, in other words, a subordinate position to faith and service. The followers of Ramanuja, Madhva and Vallubhacharya refute the doctrine of the non-reality of the phenomenal universe, and lay more stress on faith and service than on knowledge. The Hindus may be divided as pointed out in para. 164 of the Punjab Census Report of 1911 into (1) the followers of Vaishnava, (2) the orthodox grihastis, (3) the uneducated masses, (4) the followers of reformers whose doctrines do not conform to the principles of either school of thought, and (5) saint worshippers. The sects which fall under these groups are fully described in the Punjab Reports of the previous censuses, and need no further remark.

* Referred to on page 406 of the Indian Year Book for 1918.

The
strength of
sects.

94. The figures of sects returned are given in the margin according to the

Sects.	Punjab.	Delhi.
1. OLD SECTS :		
(a) Religious Orders—		
Bairagi ..	4,407	353
Udasi ..	2,061	..
Faqir ..	10,606	..
Sanyasi ..	1,381	..
Jogi ..	2,238	412
Govakh Panthi ..	1,216	61
(b) Saint Worshipers—		
Dadu Panthi ..	374	12
Gugupir ..	1,812	..
Kabir Panthi ..	37,111	9,394
Kalu Panthi ..	21,257	..
Namabansi ..	5,471	..
Pabuji ..	5,347	..
Panjpiria ..	27,363	..
Rai Dasia ..	14,400	12,668
Ram Raya ..	201	..
Sewak Darya ..	4,073	..
(c) Orthodox Hindus—		
Sanatan Dharm ..	7,385,106	270,923
2. SECTS WORSHIPPING MUSALMAN SAINTS IN ADDITION TO THEIR OWN GODS—		
Sarwaria ..	88,837	..
Shamsi ..	394	..
3. SECTS OF LOW CASTES—		
Balmiki ..	221,027	77
Lal Begi ..	437,295	12,696
Ram Dasia ..	239,869	130
Balashahi ..	3,330	..
4. REFORMERS—		
Arya ..	210,872	12,281
Brahmo ..	298	7
Dev Dharm ..	3,597	..
Nanak Panthi ..	9,716	7
Radha Sawami ..	2,710	402
5. MISCELLANEOUS—		
(a) Miscellaneous Sects ..	20,481	112
(b) Castes returned as sects ..	20,429	16
6. UNSPECIFIED ..	11,306	..
7. SECTS ANALOGOUS TO OTHER RELIGIONS ..	4,196	..

system of grouping adopted in 1911. Nearly 84 per cent. of the Hindu population in the provinces has been registered under the head "Sanatan Dharm." The word ordinarily means orthodox Hindu, but what particular form of doxy is to be considered orthodoxy is not clear. The phrase is chiefly used in opposition to the Arya Samaj, and in all probability denotes the number of persons who were averse to the use of the term "Arya." Thus the figures under the head Sanatan Dharm include a large proportion of persons who are Hindus by religion, but are unable to define their sects exactly. Sects of low caste come next in importance. The figures indicate that most of the members of the depressed classes still follow their own "Gurus" and it is only by the expansion of the term "Hindu" that they are brought within the pale of the ancient religion. The Aryas, or followers of the Vedic Dharm, rank third (2.63 per cent.) in numerical strength.

Other important entries are Sarwaria (88,837) or Sultani, the worshippers of the great Saint Sultan Sakhisarwar, who settled down and practised austerities in the country round Multan; Kabir Panthi (40,505), the followers of Kabir, a pupil of Ramanand, who was born in 1440 A. D. and whose mission was generally directed against idolatry; Panjpiria (27,363), the worshippers of five saints which every worshipper is at liberty to select for himself: Kalu Panthis (21,257), the followers of Kalu Bhagat, a waterman (*kahar*) by caste, who according to one version

was the disciple of the Sikh Guru, Arjan, and who according to another, received supernatural powers from an ascetic who gave him his *Gudri* (cloak). The figures under the head "Miscellaneous" include Sansis, Bawarias and others who really profess no religion.

95. The marginal table indicates the changes in the figures of the minor

Variation
in Sects.

Sects.	1911.	1921.	Vari- ation per cent.
ALL SECTS ..	8,773,621	9,125,202	+4.0
1. OLD SECTS ..	7,388,241	7,825,627	+5.9
(a) Religious Orders ..	27,321	23,335	-14.6
Bairagi ..	7,121	4,760	-33.2
Udasi ..	2,031	2,661	+31.0
Fakir ..	2,763	10,606	+283.9
Sanyasi ..	5,655	1,381	-75.6
Jogi ..	7,331	2,650	-63.9
Govakh Panthi ..	2,411	1,277	-47.1
(b) Saint worshippers ..	345,311	139,573	-59.6
Dadu Panthi ..	1,321	386	-70.8
Gugupir ..	4,851	1,812	-62.7
Kabir Panthi ..	89,251	46,505	-47.9
Kalu Panthi ..	36,401	21,257	-41.6
Namabansi ..	971	5,471	+462.9
Pabuji ..	6,221	5,347	-14.1
Panjpiria ..	77,681	27,363	-64.8
Rai Dasia ..	106,771	27,158	-74.6
Ram Raya ..	2,001	201	-90
Sewak Darya ..	19,821	4,073	-79.5
(c) Orthodox Hindus ..	7,015,601	7,662,118	+9.2
Sanatan Dharm ..	7,015,601	7,662,118	+9.2

sects under the five main heads since 1911. The increase per cent. in the number of the adherents of the old faith is slightly more than the increase shown by the Hindu population of the provinces. The apparent increase (283.9 per cent.) in the number of Fakirs since 1911 is probably due to the inclusion of a number of Bairagis, Sanyasis, Jogis and others under the generic term "fakir" at the present census. There has been a remarkable increase in the number of persons classed as Namabansis from 972 to 5,471: but of this increase an explanation cannot be offered. The figures, however, suggest that most of the minor sects are gradually losing ground, probably on account

Sects.	1911.	1921.	Vari- ation per cent.
2. SECTS WORSHIPPING MUSALMAN SAINTS IN ADDITION TO THEIR OWN GODS			
Sarwaria	232,413	89,231	-61·6
Shamsi	230,988	88,837	-61·5
.. ..	1,425	394	-72·4
3. SECTS OF LOW CASTES			
Balmiki	981,311	914,424	-6·8
Lalbegi	315,074	221,104	-30·0
Ramdasia	466,172	449,991	-3·5
Balashahi	199,465	239,999	+20·3
.. ..	..	3,330	+100
4. REFORMERS.			
Arya	130,195	239,890	+84·3
Brahmo	100,783	223,153	+121·4
Dev Dharm	700	305	-56·4
Nanak Panthi	3,094	3,597	+16·3
Radhasawami	21,756	9,723	-55·3
.. ..	3,862	3,112	-19·4
5. MISCELLANEOUS—			
(a) Miscellaneous sects	10,126	20,593	+103·4
(b) Castes returned as sects	17,715	20,445	+15·4
6. UNSPECIFIED	1,648	11,396	+591·5
7. SECTS ANALOGOUS TO OTHER RELIGIONS	11,934	4,196	-64·9

96. The Arya or Vedic Dharm sect is the outcome of the religious movement founded by Swami Daya Nand Saraswati who inculcated monotheism and proclaimed the infallibility of the Vedas. The Aryas accept the Vedas as Divinely revealed and are opposed to idolatry. They also favour social reforms, such as the abolition of the custom of early marriage and the introduction of widow remarriage. In other words their aim is to purge Hinduism of what they consider later accretions. A full description of the tenets and rules of the sect is given in the Punjab Census Reports of 1891 and 1911, and needs no addition.

The strength of the members of the Samaj has been steadily increasing from 1877 when the Samaj was founded. In 1891, the adherents of the Samaj numbered 14,030 (8,103 males and 5,927 females). In 1911 the total number of Aryas was found to be 100,846 (57,956 males and 42,890 females). In 1901 separate statistics for Aryas were not prepared and hence the number cannot be ascertained. The number now recorded under one or the other of the following

Aryas returned in Punjab and Delhi as	Persons.	Males.	Females.
Sects of Hindus	223,153	124,852	98,301
Sects of Sikhs	15	8	7
Total	223,168	124,860	98,308

denominations:—Arya, Vedic and Vedic Dharm is shown in the margin. The increase in the number of Aryas seems to be largely due to the new process of proselytisation known as Shuddhi introduced by the members of the Arya Samaj. The majority of the converts are drawn from Brahmanic Hindus but special efforts are made to secure the re-conversion of converts from Hinduism to Christianity or Islam and the reclamation of the depressed classes. The theory of the submergence of caste in the Arya community appeals most to the lower classes, who look to the new system to raise their social status and to put them on the same footing as the higher classes. The conclusion is not inconsistent with the change in the numbers of persons who returned their caste as Aryas in 1911 and 1921. In 1911 only 213 persons were recorded as Aryas by caste while in 1921 the number returned under this head is shown in Table XIII (caste or tribe) as 50,884. The latter number probably includes a considerable number of low castes, who were allowed to return their castes as Arya, as the result of the efforts of the Shuddhi Sabha, Hoshiarpur, and of the Arya Prati Nidhi Sabha, Punjab.

The followers of Vedic Dharm have been registered in all the districts and

District.	Number of Aryas.
Rohtak	27,089
Karnal	13,312
Lahore	12,254
Gurdaspur	36,643
Sialkot	34,946
Delhi	12,281

States of the provinces except the following:—Dujana, Bashahr, Jubbah, Loharu, Bilaspur and Suket. The districts where the Samaj has made great headway are noted in the margin. Rohtak is the only district which for the first time figures in the census records as the centre of the Arya Movement. The caste which has supplied the largest number of Aryas in this district is that of the Jat (23,995).

Aryas or
Vedic Dharm.

Brahmo.

97. The number of Brahmos returned in both the provinces is 305, or 395 less than in 1911, a fact which indicates that the movement is losing ground. The actual number, however, cannot be taken as showing the extent to which the doctrines have ceased to attract fresh recruits. As noticed in 1911 Brahmos are not considered as outcastes from Hindu society, and find no difficulty in stepping back to the folds of orthodoxy, and thus the progress made, from time

Districts.		Urban Area.	Rural Area.
Lahore	..	167	4
Simla	..	24	..
Montgomery	..	15	7
Hissar	..	16	2
Sheikhupura	..	13	..
Rawalpindi	..	10	..
Sialkot	..	8	..
Rohatak	..	5	3
Ambala	..	4	..
Gujranwala	..	4	..
Gujrat	..	1	..

to time, in the numerical strength of the body is counteracted. Again, with the spread of English education and the inculcation of social reforms which formed the chief aim of the Samaj, the modernist Hindu feels no necessity to separate himself from the ranks of his co-religionists and enrol himself as Brahmo. Those who still declare themselves as Brahmo come mostly from towns, as appears from the statement drawn up in the margin for districts of the Punjab. The castes from which the members of this sect are chiefly recruited are Brahman (82), Khatri (74), Arora (37), Ghirath (18), Ahir (12) and Jat (10).

There are three sections of Brahmos, viz., the Adi Samaj, the Nababidhan Samaj, and the Sadharan Samaj. The Adi Samaj condemns idol worship, but favours the maintenance of the caste system so far as it does not conflict with religious beliefs. It practically adheres to the doctrines preached originally by Raja Ram Mohan Roy, the founder of the Brahmo Samaj. Its members style themselves Theistic Hindus, the chief difference between them and other Hindus being that they are Monotheists. The Nababidhan Samaj which owes its origin to Keshab Chandra Sen is less conservative and more eclectic. They consider the scriptures of other religions as sacred as well as their own. The most enlightened and advanced section is Sadharan Samaj, which discards caste distinctions and advocates the raising of the status of women.

Dev Samaj.

98. As is well known, this Samaj was founded in 1887 by Shri Pandit Sattyanand Agnihotri who is also called "Shri Dev Guru Bhagwan" and "The Dev Atma." He declared that his life mission was to bring the reign of Truth and Goodness into this world by bringing changes into the minds and heart of mankind. When Shri Dev Guru Bhagwan proclaimed his life mission he had a sincere belief in the existence of "God," which he received from his ancestors, and this belief he held for about 12 years thereafter. But with the gradual evolution of his attachment to the ideals of Truth and Goodness, he found this belief to be *entirely groundless*, and renounced it in 1894, just as he had done in the case of various other beliefs which he had acquired from his early surroundings. A full account was given in the last census report to which the reader is referred for complete information regarding the teaching and development of the Samaj.

The Samaj has done very useful work during the decade in the spread of moral and literary education among the masses and the introduction of many social reforms. As many as 5,156 persons are reported to have pledged themselves to refrain from one or more such evils as dishonest dealing, bribe-taking, theft, repudiation of debts and deposits, gambling, and the use of intoxicants. Scores of persons are said to have made reparation of wrongs (Hani Parishodh) in various ways. In 1917 the Government made over to the Dev Samaj for reformation two settlements of criminal tribes in the Sialkot district. The efficient management of the Dev Samaj claims to have brought about remarkable changes in the lives of these notoriously criminal people. On the literary side the Samaj has opened 16 new schools, one High school for boys, 4 schools for the depressed classes, 4 schools for criminal tribes, 3 Primary and one Middle school for boys, and 4 Primary and Middle schools for girls, during the last 10 years. The special characteristic of these schools is that along with intellectual education, moral training is imparted in them. A new college named the Ramsukh Das College has recently been opened at Ferozepore by an esteemed member of the Dev Samaj, Shriman Gowardhan Das, B. A., Vakil, High Court, in memory of his father.

The total number of Dev Samajists in the provinces who returned their religion as such at the census was 3,597, as against 3,094 in 1911. The districts

and States registering the largest numbers are Ambala (778), Ferozepore (358), Sialkot (140), Lyallpur (406), Patiala (428) and Bahawalpur (1,493). There is, however, reason to believe that the number of followers of this Samaj is much greater than appears from the census returns. Thus in Lahore which is the centre of the movement the number has fallen from 133 to 71, which suggests a possible want of accuracy of the returns. Again in the Delhi Province none has been returned under this head—a very questionable result. The members of the Samaj belong to a number of different castes, the most strongly represented being Bania, Arora, Jat, Bawaria, Khatri, Saini and Brahman.

Section VI.—Sikhs.

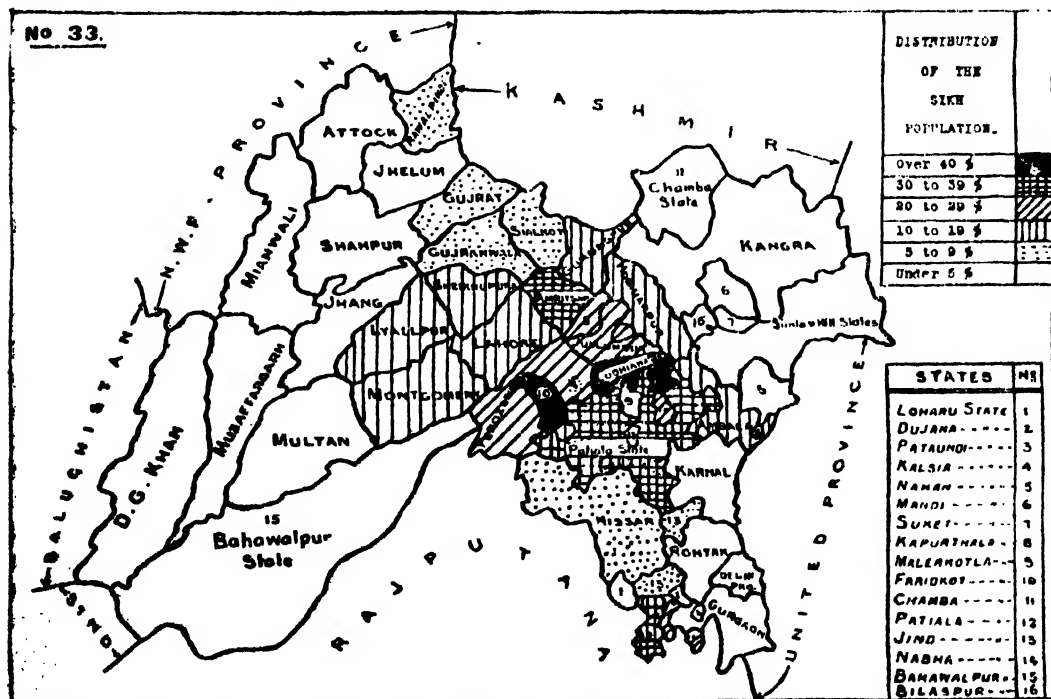
99. It is very difficult to define Sikhism because it is not sharply divided from Hinduism as regards religious beliefs. The Sikhs, like the Hindus, believe in the transmigration of the soul, the law of Karma, and in the three modes of attaining union with the Supreme Being. The faith owes its origin to Guru Nanak, who flourished in the latter half of the 15th century of the Christian Era. Guru Nanak preached that there is only one true God, he condemned idol worship, proclaimed the futility of pilgrimages, and declared that the path to salvation lies through good deeds combined with devotion to the Supreme Being. Thus Guru Nanak strove not to found a separate religion as a revolt from Hinduism, but to reconcile the ancient beliefs with the purer creed. Sikhism continued to exist as a pacific cult till about the end of the seventeenth century when the political tyranny of the Musalmans, and the social tyranny of the Hindus converted it into a militant creed. The momentous change was accomplished under the direction of Guru Govind Singh, the tenth and the last of Gurus. His teachings did not effect any material change in the Sikh creed so far as religious principles were concerned, but he tried to organise the Sikhs into a separate nation, and with this object ordained on them the observance of certain rules of conduct, and insisted on a definite ceremony of initiation (Pahol). The Sikh believer was required, besides accepting the religious doctrines of the earlier Gurus, to wear long hair and refrain from smoking. These two distinguishing features were taken as a standard for judging between Hindus and Sikhs at the Census of 1891. The rule was retained at the Census of 1901.

The difficulties experienced in the practical application of the definition led to its modification in 1911. In 1911 the statement of the persons enumerated regarding religion was accepted without question. The same rule was repeated at the present census because the term "Sikh" includes not only those who follow the ordinances of Guru Govind Singh, i.e., Kesdharis, but also Sahjdharis. Both sections accept the tenets held by the Gurus and embodied in the Granth, and being strict monotheists repudiate the authority of the Vedas.

100. The local distribution of Sikhs is illustrated by the map printed below. More than half the total population of Sikhs in the Punjab and Delhi

Meaning of
the
term
Sikh.

Local dis-
tribution.



f-

provinces lives in the Indo-Gangetic Plain West where they represent 18·3 per cent. of the population. The four chief centres of the Sikh population are Ludhiana and Amritsar in the British Territory, and Faridkot and Patiala among Punjab States. In the Ludhiana district their relative strength is 415 *per mille* of the population, while Amritsar, which is the most important centre of Sikh religious activity, has 388 Sikhs to every 1,000 of population. The highest percentage of Sikhs (44·2) to the total population is met with in the Faridkot State, and Patiala follows next with 34·8 per cent. The other districts and States in which Sikhs are found in considerable numbers are Ferozepore, Jullundur, Nabha, Malerkotla and Kapurthala. The Sikh element is fairly strong in Lyallpur, Gurdaspur, Lahore, Sheikhupura, Ambala and Kalsia. Their proportion in these districts and States ranges between 164 to 139 *per mille*. The smallest proportion (5 per 10,000) is found in Mandi State in the Himalayan Division where Hindus predominate. There are no Sikhs in Loharu, Dujana and Pataudi States.

Variation.

101. The variation in the strength of Sikhs from one census to another is shown in the margin. It will be observed that

Census.	Actual number of Sikhs.	VARIATION PER CENT. IN	
		Sikhs.	Total population.
1881 ..	1,706,165	..	..
1891 ..	1,819,371	+8·4	+10·1
1901 ..	2,102,896	+13·7	+6·3
1911 ..	2,883,729	+37·1	+2·2
1921 ..	3,110,966	+7·8	+5·7

Sikhism has made a very marked advance since 1881. The Sikhs now number 226,331 souls more than in 1911—an increase of 7·8 per cent.—whereas Musalmans and Hindus have increased only 5·5 and 4 per cent, respectively. Sikhs have made the greatest advance (9·8) per cent. in the Indo-Gangetic Plain West where their proportionate numbers, shown in the Subsidiary Table II appended to this Chapter, has risen since 1911 from 1,808 to 1,834 per

10,000 of the population. The reason for this relatively more rapid growth of Sikhs during the last decennium undoubtedly lies in the realisation by the Sikhs

District or State.	VARIATION PER CENT. SINCE 1911 IN		
	Sikh.	Hindu.	Total population.
Jullundur ..	+17·0	-7·7	+2·5
Ludhiana ..	+13·9	+3·2	+9·7
Ferozepore ..	+15·3	+11·9	+14·4
Amritsar ..	+13·0	-3·4	+5·5
Gurdaspur ..	+13·7	-8·9	+1·8
Kalsia ..	+28·1	-6·1	+2·6
Faridkot ..	+20·3	+3·3	+15·6
Kapurthala ..	+18·1	-4·9	+6·0

of the fact that their religion is quite independent of Hinduism, and the conversion to Sikhism of many of the depressed classes who formerly swelled the ranks of Hindus. The districts and States in which the largest increases in the number of Sikhs have occurred are shown in the margin. The closer examination of the figures reveals that Hindus have decreased in the districts and States which show a high percentage of increase among Sikhs. Statistics of conversion are not

District.	Hindu.		Musalman.		Sikh.	
	1911	1921	1911	1921	1911	1921
Ferozepore ..	91,033	91,269	13,263	4,221	3,546	13,529
Amritsar ..	97,347	85,336	984	34	6,360	14,125

available but the figures of Sikh Chuhras and Mazhabis registered in the districts of Ferozepore and Amritsar suggest that untouchables are being fast absorbed into Sikhism as the result of the efforts of the Sikh preachers. The other contributory causes are possibly the frequency

of widow remarriage, less disparity in the ages of husband and wife and consequently a higher birth-rate. Separate vital statistics for Sikhs are not available so that these causes cannot be examined in detail.

Growth of Sikh sects.

102. The history of the Sikh religion shows that till the time of the 9th Guru, Sikhism was never treated as a separate religion and its followers were not regarded as belonging to an alien religion by Hindus. A new form of baptism was introduced by Guru Govind Singh, which laid the foundation of a new sect in the Sikh religion. The Guru explained the doctrines of his new Khalsa religion to the Sikhs who were invited to attend the great Bisakhi fair at Anandpur in the year 1699. Thus "since the time of Baba Nanak, Charanpahol has been customary. Men drank the water in which the Gurus had washed their feet, a custom which led to great humility; but the Khalsa can now only be maintained as a nation by bravery and skill in arms. I now institute the custom of baptism by water stirred with a dagger, and change my followers from Sikhs to Singhs or Lions,

They who accept the nectar of the Pahol shall be changed before your very eyes from jackals into lions and shall obtain empire in this world and bliss hereafter. Let all embrace one creed and obliterate differences of religion. Let no one deem himself superior to another. Let none pay heed to the Ganges and other places of pilgrimages. Let men of the four castes receive my baptism, eat out of one dish, and feel no disgust or contempt for one another." The Guru ordained that his followers should wear the following articles, *viz.*, Kes (long hair), Kanga (a comb), Kirpan (a sword), Kachh (short drawers), and Kara (steel bracelet). Those who did not accept the Guru's baptism were termed Sahjdhari, thus splitting Sikhism into two broad divisions (1) Khalsas, (2) Sahjdhari. The tenth Guru when hard pressed by the Emperor Aurangzeb settled himself in Nadiar (Hyderabad State) where he happened to baptise one Madho Das, a Bairagi ascetic. Madho Das, known also as Banda, was recognised by Sikhs as their leader on the death of the Guru. He proclaimed himself as the eleventh Guru and reintroduced the old custom of "Charanpahol," and baptised a large number of Sikhs in this form. A majority of the Sikhs, however, did not accept the change and the result was, that four sub-sects arose in the Khalsa religion, *viz.*, (1) Sikhs, (2) Mazhabi Sikhs, (3) Tat Khalsas and (4) Bandia Khalsas.

The other important sub-sects of Khalsa are Akalis and Kukas. The word "Akali" literally means a God worshipper. Opinions differ as to the foundation of this sect. Some say that Ajit Singh was its founder, while others trace its growth to Guru Govind Singh's days. The blue dress of the Akali is said to have been suggested by a piece of blue cloth preserved by Guru Govind Singh in memory of his troubles, as a remnant of the dress which he wore in imitation of the robe of a Musulman saint, when he tried to escape from the Anandpur Fort, where he was besieged by the Mohanmadan Army. The sect of Akalis has long been known as a militant organisation. Their headquarters were the Akal Bunga at Amritsar, and they claimed the leadership of the Khalsa.

The Kuka sect was founded by one Bulaka Singh, an Udasi, of Hazro in the Attock District. The doctrines were preached after the death of the founder by Ram Singh, a carpenter of Ludhiana district, who declared himself an incarnation of Guru Govind Singh. The Kukas differ from ordinary Sikhs in the manner of wearing the turban, and in carrying a necklace or woollen cord, divided into knots which serve as beads for prayer. They may be regarded as a puritanical Sikh sect. In addition to these sects there are two principal ascetic orders, namely Udasi and Nirmala. The Udasi sect was founded by Baba Siri Chand, the son of Guru Nanak, who is alleged to have been a born Yogi. Siri Chand was not installed on the Gaddi after the death of his father, but he was recognised as a leader and prophet by the Udasis, who refused to acknowledge Angad, who was elected to succeed Nanak, as a Guru. Under the leadership of Siri Chand, Udasis gathered enormous strength and formed themselves into a purely ascetic order. The Udasis are not uniform in their outward appearances. Some wear long hair, some have matted locks, while others shave their head and beard. Nirmalas allege that their order was founded by Guru Nanak himself.

103. The statement given in the margin shows the numerical strength of the different sects returned in the provinces under the two main divisions—Keshdhari and Sahjdhari. It will appear that Keshdhari constitute the bulk of Sikh population, *i. e.*, about 92 per cent. of the total population of the Sikhs. The Sahjdharis represent 7 per cent. of the Sikh population. The districts where their number is largest are Montgomery (36,845), Jullundur (29,282) and Hoshiarpur (23,492). The remaining one per cent. is made up of the sects analogous to other religions and miscellaneous sects, Sadhu (575), Nirmala (112), Narankari (21), Gulab Dasi (74), Baba

Sects.	Keshdhari.	Sahjdhari.	Strength of Sikh sects.
Gurind Singh	42,678	..	
Hazuri	246,384	1,613	
Kuka Namdhari	4,037	..	
Mazhabi	2,307	..	
Nihang	3,954	..	
Nanak Panthi	22,486	14,179	
Panjpuri	4,592	..	
Ram Dasi	10,568	209	
Radhasawami	..	378	
Ram Rai	695	..	
Sawaria	14,254	2,383	
Tat Khalsa	531,291	..	
Udasi	776	66	
Unspecified	1,932,386	209,770	
Total	2,876,320	228,598	

Kalu (87), Bedi Sodhi (61), Garib Dasi (5), Baba Gurditta (2), Nam Dev (7), Kabir Panthi (22) and Amraoti (16). Among Keshdhari the Tat Khalsas, Hazuris,

and Nanak Panthis occupy prominent positions. The Patiala State being a Sikh State has the largest percentage of Tat Khalsas. The term though originally designed to denote the followers of Guru Govind Singh in opposition to the Bandia Khalsa, seems to have lost its historic significance, as the word Keshdhari is considered comprehensive enough to include the staunch disciples of Guru Govind Singh. It is for this reason that we find that in Amritsar, which is the principal centre of the Sikh religion, Sikhs have registered themselves under the general head "Keshdharis." Hazuris are both Sahjdharis and Keshdharis, the number being 246,384 Keshdharis, and 1,613 Sahjdharis. Hazuris follow the behests of Guru Govind Singh, and the appellation (as described in para. 219 of the Punjab Census Report 1911) is used for those who have been initiated at Hazur Sahib, in Hyderabad, Deccan, where the tenth Guru breathed his last. The Nanak Panthis number 22,486 Keshdharis, and 14,179 Sahjdharis. Etymologically the term covers all Sikhs, because the faith owes its origin to Guru Nanak, but in its popular sense it designates those persons who have not particularly attached themselves to the tenets of other Gurus. The only sect worth noticing under the head Sahjdhari is "Sarwaria." The distinguishing characteristic of the adherents of this sect is that they do not eat Jhatka meat.

Variation
in Sects.

Sects.				STRENGTH OF SECTS.		Variation per cent.
				1911.	1921.	
ALL SECTS	..	..	..	2,883,729	3,110,060	7.8
KESDHARIS	..	..	..	8,46,804	2,876,320	19.4
Govind Singh	..	..	..	107,827	42,678	-60.4
Hazuri	..	..	..	287,548	246,384	-14.3
Mazhabi	..	..	..	726	2,304	217.5
Nihang	..	..	..	4,270	3,954	-7.4
Nanak Panthi	..	..	..	99,601	22,486	-77.4
Panjpuria	..	..	..	10,372	4,592	-55.7
Ram Dasia	..	..	..	8,166	10,568	30.4
Ram Rai	..	..	..	20,686	604	-97.1
Sarwaria	..	..	..	53,206	14,261	-73.2
Tat Khalsa	..	..	..	344,058	531,290	54.4
Udasi	..	..	..	879	770	-11.7
Unspecified	..	..	..	1,466,030	1,992,300	35.9
SAHJDHARIS	..	..	..	450,823	228,598	-49.3
Hazuri	..	..	..	6,044	1,613	-73.3
Nanak Panthi	..	..	..	176,036	14,179	-91.9
Radhasawami	..	..	..	424	378	-10.8
Ram Rai	..	..	..	5,800	..	-100.0
Ram Dasia	..	..	..	2,206	209	-90.5
Sarwaria	..	..	..	25,830	2,381	-90.8
Udasi	..	..	..	591	66	-88.8
Unspecified	..	..	..	233,752	209,770	-10.3
Miscellaneous	..	..	..	17,559	1,812	-89.7
SECTS ANALOGOUS TO OTHER RELIGIONS	..	..	..	7,333	3,330	-54.5

marginal statement. In 1911, there were 2,048,014 Keshdharis; there are now 2,876,320, of whom 1,992,386 recorded themselves as such without mentioning any sub-sect. The Sahjdharis now aggregate 228,589 as against 450,823 in 1911. Thus compared with 1911 figures Keshdharis show an increase of 19.4 per cent. while Sahjdharis present a loss of 49.3 per cent. in their respective strengths.

The abnormal increase in the number of Keshdharis seems

to be mainly the result of accretion from the ranks of Sahjdharis and Hindus.

District or City.	SAHJDHARI.		KESDHARI.	
	1911.	1921.	1911.	1921.
Ambala	12,052	6,001	82,333	91,429
Hoshiarpur	48,499	23,494	85,354	119,375
Jullundur	42,177	29,285	133,718	170,838
Ludhiana	17,020	5,597	189,520	230,124
Ferozepore	15,247	5,113	240,325	297,647
Amritsar	6,140	1,568	246,757	285,436
Gurdaspur	9,674	5,467	111,383	132,492
Sialkot	16,690	6,446	65,461	68,498
Lyallpur	24,875	7,986	121,276	152,827
Kapurthala	12,516	7,148	41,759	56,926
Malekotla	3,729	349	17,287	21,479
Patiala	67,163	7,532	465,119	514,774
Jind	1,152	85	21,414	27,932

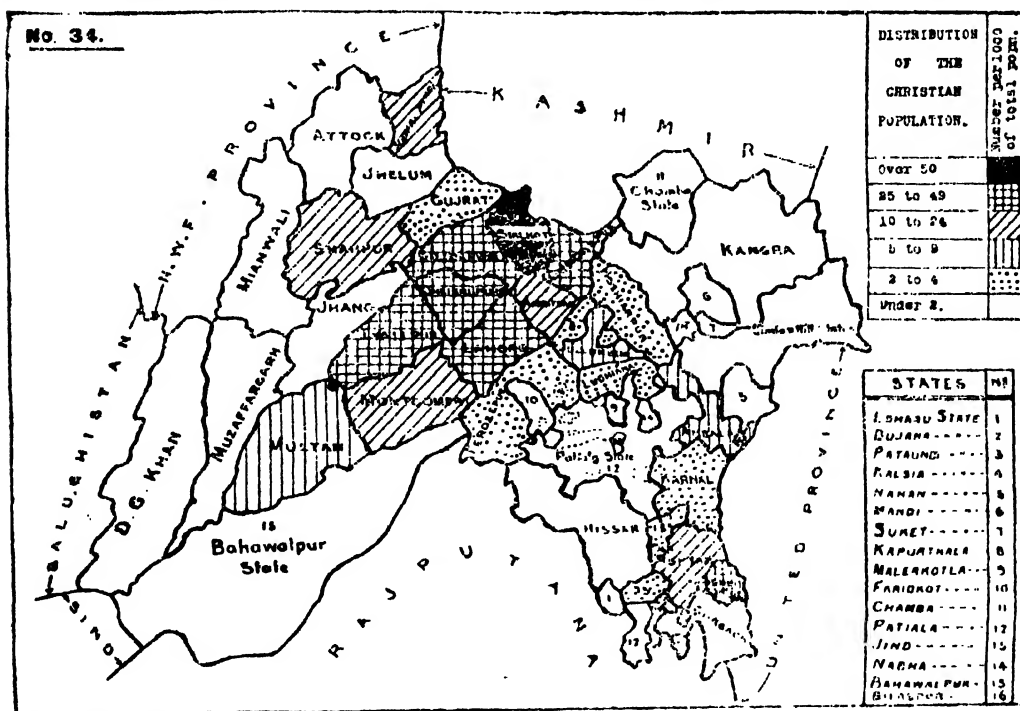
observed at the end of the 19th century when a Singh Sabha was organised in Amritsar City. Its members were then reported to be busy, not only in the city, but also in rural areas, inculcating the principles of the Sikh faith and urging the necessity of a separate religious and political existence. A new movement was started by the Tat Khalsa between the years 1905 and 1912, which established a

The conclusion is borne out if we compare the figures of Keshdharis and Sahjdharis for districts and States which show the largest decreases in the strength of Sahjdharis. The figures are noted in the margin. It appears that the separatist movement, which was held largely responsible in 1911 for the increase in the number of Sikhs and for a corresponding decrease in the followers of Hinduism, has done a good deal during the past decade in popularising the tenets of Guru Govind Singh. The activities of Khalsas in spreading their religious doctrines were first

central institution called the "Chief Khalsa Dewan." The objects of this Association are fully described on page 157 of the Punjab Census Report, and need not be recapitulated. It had its branches in nearly all districts and States of the Punjab, and its scope was limited more or less to social and religious organisation and reformation. It is due to the untiring zeal of the members of this religious body that the Tat Khalsa show an increase of 54·4 per cent., whereas other minor sects have lost their separate existence. The third association which is of recent birth is known as "Sharomani Gurdawara Parbandhak Committee." It is an un-registered body and its aims and objects are declared to be (1) to arrange for the management of the Sikh Shrines in accordance with the principles of Sikhism and Panthak Jathedari, (2) to introduce and maintain the Guru doctrines in all the Gurdawaras, (3) to provide, if necessary, and to make arrangements for the imparting of religious and moral education. The Committee chiefly represents the Akali sects, but has received support from Sikhs generally in its campaign for the control of Sikh shrines, in which it has attained a considerable measure of success.

Section V.—Christians.

105. The map printed below shows the local distribution of Christians. There are now 346,259 Christians in the provinces, or 13 *per mille* of the total population. The local distribution of Christians.



of the total population. Of these 7·6 per cent. belong to European and allied races, 1·4 per cent. are Anglo-Indians, and 91 per cent. Indian Christians. Nearly half the total number of Christians are found in the districts and States of the Indo-Gangetic Plain West, chiefly in Gujranwala, Lahore and Sheikhupura, where their proportion per ten thousand of the population ranges between 448 and 411. Next in importance comes the Sub-Himalayan tract which contributes more than one-third of the total Christian population of the provinces. The districts of this tract in which they are chiefly settled are Sialkot and Gurdaspur, where they constitute 7 and 4 per cent., respectively, of the population. The districts in the North-West Dry Area which contain a fair proportion of Christians are Lyallpur, Shahpur and Montgomery. Proportionately the greatest number of Christians is found in the Simla district (84 per cent.), and the smallest in the Dera Ghazi Khan district (1 per 10,000) in British Territory. No Christian was returned in Dujana, Pataudi, Jubbāl and Loharu States.

Variation.

106. The Christian community has almost doubled itself during the last de-

Race or Nationality.	1911.	1921.	Variation per cent.
All races	199,751	346,259	73·3
Europeans and allied races	32,278	26,313	-18·5
Anglo-Indians,	3,479	4,915	41·3
Indian Christians	163,994	315,031	92·1

District.	1911.	1921.	Decrease in strength.
Ambala	5,914	1,403	4,811
Jullundur	1,285	764	521
Perozepore	2,098	1,224	874
Lahore	4,796	3,847	949
Sialkot	2,287	1,800	487
Rawalpindi	7,054	6,226	828

cade. While in 1911 there were 199,751 Christians in both the provinces, the number now registered is 346,259, or 73·3 per cent. more than in 1911. The inset table gives the variation exhibited by the different racial sections of the Christian population since 1911. There has occurred an actual decrease in European Christians which is probably due to the reduction of the British Army in India, and to diminished commercial activity. As would appear from the figures noted in the margin, the decrease is mostly confined to the districts containing Military Cantonments. It may also be possibly due to some extent to the partial replacement of Europeans by Indians in both the higher and subordinate services.

The increase in the number of Anglo-Indians, as compared with 1911, is, in all probability, partly due to some Anglo-Indians who recorded themselves as Europeans at the last census, having returned themselves under their proper designation, and partly to a growing tendency among Indian Christians to pass themselves off as Anglo-Indians. The above mentioned facts are proved by the increase registered in Anglo-Indians in the age group 30 and over, which is 502, or more than one-third of the total increase shown by this community within the last ten years.

The great rise in the number of Indian Christians between 1911 and 1921 affords a striking indication of the increase in missionary activity during the decade. In 1881 the total number was 3,796. In 1891 Indian Christians numbered 19,547, and a decade later the number rose to 37,980. The increase since 1901 has been more than maintained, and the present census shows 315,031, or an increase of 311,235, since 1881.

The districts and States in which Christianity has made the greatest develop-

District or State.	1911.	1921.	Absolute increase.
Hissar	273	1,424	751
Rohtak	334	10,030	9,699
Karnal	982	3,320	2,338
Kapurthala	107	1,100	993
Amritsar	4,763	12,777	8,010
Gujrat	579	2,377	1,803
Montgomery	581	101,008	9,827

ment during the decade are named in the margin. The increase in Hissar, Rohtak and Karnal districts is due mainly to the zeal and activity of the Methodist Episcopal Mission. In Kapurthala the increase appears to be the work of the Punjab Mission of the American Presbyterian Church. In Gujrat and Amritsar the Church of Scotland Mission, and the Church Missionary Society have done

useful work. In Montgomery several missions are reported to have brought about the result, the chief among them being the Associated Reformed Presbyterian Mission.

Strength of sects.

107. Detailed figures for the Christian sects are given in Imperial Table

Sect.	Punjab.	Delhi.
Abyssinian	1	..
Anglican Communion	63,437	5,937
Armenian	107	..
Baptist	1,378	1,178
Congregationalist	31	..
Greek	3	..
Lutheran	36	3
Methodist	33,059	2,985
Minor Protestant Denomination	6,631	145
Presbyterian	133,956	107
Protestant (Unspecified)	16,484	560
Quaker	1	..
Roman Catholic	38,217	2,010
Salvationist	38,111	5
Syrian	26	..
Sect not returned	1,456	380

XV, and the totals for the provinces are noted in the margin. The Presbyterians constitute the bulk of the Christian population of the Punjab, representing 40 per cent. thereof. Out of 134,063 followers of this sect found in both the provinces, 1,349 or 1 per cent. are Europeans, 110, or less than 1 per cent. are Anglo-Indians, and 132,604, or 98 per cent. are Indian Christians. They have been returned from all the districts of the Punjab, notable exceptions being the Hissar, Rohtak, Gurgaon, Multan, Muzaffargarh and Dera Ghazi Khan districts. The districts where they are found in over-whelming majority

are Lahore, Sialkot, Gujranwala, Sheikhupura and Montgomery. Anglicans come next in point of numerical strength to Presbyterians, numbering 69,374, of whom 26 per cent. are Europeans, 4 per cent. Anglo-Indians, and about 70 per cent. Indian Christians. The districts where they are most numerous being Lahore (11,376), Gujranwala (10,287) and Lyallpur (10,045). Roman Catholics rank third, their number being 40,225. Of these 12 per cent. are Europeans, 4 per cent. Anglo-Indians, and about 84 per cent. Indian Christians. The important centres of the mission are the Sialkot and Lyallpur districts. The number of Salvationists is almost equal to that of Roman Catholics, there being 38,123 persons of whom 38,091 are Indians, the balance representing the number of European Officers in charge of the mission work in the Punjab. The largest number of Salvationists is found in Gurdaspur (16,334), Lyallpur (8,755) and Amritsar (6,112). Methodists number 36,044 of whom 35,667 are Indians, 331 Europeans and 46 Anglo-Indians. They are confined mostly to the districts of the Ambala and Lahore Divisions of the Punjab. Other important sects are Abyssinian (1), Armenians (107), Congregationalists (31), Greek (3), Lutheran (39), Quaker (1), and Syrian (26).

The sects included under the heading "Minor Protestant Denominations" are the American Church of God Mission (3,944), Brethren in Christ Mission (17), Church of Christ Mission (1,456), Church of India (11), Mennonite Mission (123), and Seventh Day Adventists (1,165).

The entries which did not indicate any particular set of beliefs or where the word "Protestant" was only put down in the column for sects, were included in "Unsectarian or Unspecified Protestants." The detail is given on the title page to Table XV.

108. The figures of Christian sects for 1921 are compared with those of 1911 in the margin. There has been since 1911 an important increase in the strength of all sects except Greek, Lutheran, and Quakers, the slight decrease in which seems to be due to the absence of missionary organisation. Anglicans have increased from 53,427 to 69,374 or 29·8 per cent. The number of Europeans, however, returned under this head is comparatively small, being 18,471, a decline of 3,778 as compared with the figures of 1911, and the increase is made up of 638 Anglo-Indians and 19,087 Indians. The decrease among Europeans is due to the causes discussed in paragraph 106 above. The districts which have shown the largest increases are Lahore (5,906). Amritsar (2,937), Sialkot (2,557) and Delhi (3,987). Decreases have taken place in the districts of Ambala (2,546) and Rawalpindi

Sect.	1911.	1921.	Percentage of variation 1911 to 1921.
All Denominations ..	199,693	316,259	73·4
Abyssinian ..	1	1	100·0
Anglican Communion ..	53,427	69,374	29·8
Armenian ..	12	107	791·7
Baptist ..	1,340	2,556	90·7
Congregationalist ..	25	31	24·0
Greek ..	18	3	-83·3
Lutheran ..	115	39	-66·1
Methodist ..	12,850	36,044	180·5
Minor Protestant Denominations ..	1,479	6,776	358·1
Presbyterian ..	95,631	1,34,663	41·1
Protestant (Unsectarian) or (sect not specified) ..	930	17,044	1732·7
Quaker ..	2	1	-66·7
Roman Catholic ..	15,847	40,225	153·8
Salvationist ..	18,973	38,123	110·9
Syrian (Jacobite) ..	1	26	2,500·0
Sect not returned ..	538	1,846	243·1

(963). Armenians now aggregate 107 as against 12 in 1911. Baptists have increased by 1,216 during the past decade. The number of Europeans, however, has fallen from 186 to 127, but the number of Anglo-Indians and Indian members of this sect has increased from 1,154 to 2,429. Increases have occurred mainly in Delhi and in the Ambala district and Patiala State. Congregationalists show an increase of 6, and Greeks a decrease of 15. The number of Methodists has risen from 12,850 to 36,044, an increase of 180·5 per cent. An increase has occurred among Indian Christians, chiefly in Rohtak (9,267), Lahore (5,613) and Gurdaspur (2,159). The high percentage of increase under "Minor Protestant Denominations" is due to the inclusion in this sect of 3,944 persons, who returned themselves as members of American Church of God Mission. The strength of Presbyterians has increased by 39,024 or 41·1 per cent. Notable increases have taken place in Jullundur (1,875), Lahore (9,626), Gujranwala (9,100) and Montgomery (3,471). Their number has fallen in the districts of Lyallpur and Shahpur by 2,141 and 4,541, respectively, owing to the emigration of Indian Christians from these districts to the newly colonised districts of Montgomery and Sheikhupura. Roman Catholics have increased during the last ten

years, by 24,378, or 153·8 per cent. Towards this increase Anglo-Indians have contributed 507, and Indian Christians 25,360. The number of European members has gone down from 6,310 to 4,821 or 23·6, per cent. The districts in which the largest number of converts have been secured are Sialkot (7,003), Montgomery (3,424) and Lyallpur (7,685). Salvationists have added 20,050 persons to their number since 1911. The increase is chiefly represented by Indian Christians. The number shown under "Sects not returned" and "Unspecified Protestants" is larger than in 1911 in spite of every effort to obtain as correct a return of the Christian Sects as possible. Missionary societies were asked to give slips to their converts showing the name of the Church to which they belonged so that uneducated Indian Christians might know what entry they should make, but the result was not satisfactory.

Section VI.—Minor Religions.

Jain.

109. Jainism was originally a sect of Hinduism, and even now the boundary line between the two religions is indeterminate. Jains are still regarded as a recognised section of Hindu Society, and consequently many Jains returned themselves as Jain Hindus in spite of clear instructions to the contrary. There are now 46,019 Jains in these Provinces, or 756 less than in 1911. The decrease seems chiefly to be due to some Jains having recorded themselves as Hindus. It is also possible that they are not so prolific as other constituents of the population owing to their living in towns, being engaged in sedentary occupation, and abstaining from nourishing food, such as meat and eggs. Nearly half the total number of Jains in the Punjab are settled in the districts of the Ambala Division, chiefly in Hissar, Rohtak and Karnal. There are 4,698 Jains in the Delhi Province principally belonging to the Bania class. Other districts and States of the Punjab which possess a fair number of Jains are Patiala (3,249), Sialkot (2,147), Ludhiana (1,796), Jind (1,548), Amritsar (1,375), Ferozepore (1,211), and Hoshiarpur (1,079).

There are two main sects of Jains, known as Digambaras and Svetambaras. The important sub-sects are Dhundia and Sathanakwasi. About 44 per cent. of Jains are Digambaris, and 53 per cent. Svetambaris of all kind. 3 per cent. did not return any sect and were grouped under the head "miscellaneous."

Buddhist.

110. Of 5,918 Buddhists enumerated, 3,019 belong to the Kangra district and 2,052 to Bashahr State. The rest are distributed in the districts noted in the margin. Their number has declined from 7,690 to 5,918 since 1911, and the decrease is shared chiefly by the Kangra district (873), and Bashahr State (636). The decrease in the Kangra district may be due to migration, but in the Bashahr State the loss seems to be part of the general decrease of 3 per cent. in the population.

Ambala	5	Shahpur	2
Simla	20	Nahar	10
Ferozepore	6	Bilaspur	76
Lahore	170	Chamba	541
Amritsar	5	Patiala	3
Gurdaspur	3	Delhi	6

Parsi.

111. The number of Parsis according to the recent census is 598 or 8·4 per cent. less than in 1911. They are generally immigrants from Bombay and their principal occupation is trade. The districts and States in which their strength is more than 10 are noted in the margin. The decrease in their numbers since 1911 seems to be due to migration.

Ambala	30	Gurdaspur	12
Simla	36	Sialkot	27
Ludhiana	19	Rawalpindi	41
Ferozepore	15	Multan	47
Lahore	179	Patiala	21
Amritsar	58	Delhi	72

Jew.

112. The Jews, very few of whom are domiciled Indians, have decreased from 54 to 36. They have been chiefly recorded in Lahore (13), and Delhi (17), where Government Offices and Military Cantonments are located.

Indefinite beliefs.

113. The term includes all those persons who did not profess to belong to any religion, but returned themselves as Atheists, Agnostics, etc. At the previous census they were included among Christians, but now they have been excluded from the Christians in Table VI, and shown separately under the instructions of the Census Commissioner. Their number is 15 of whom 12 are Europeans, 1 Anglo-Indian, and 2 Indians.

I. General distribution of the population by religion. II. Distribution by districts of the main religions. III. Christians, Number and Variation. IV. Religions of Urban and Rural Population.

SUBSIDIARY TABLE I.

General distribution of the population by religion.

Religion and Locality.	Actual number in 1921.	PROPORTION PER 10,000 OF POPULATION IN.					VARIATION PER CENT. INCREASE (+) DECREASE (-).				PERCENTAGE OF NET VARIATION.
		1921.	1911.	1901.	1891.	1881.	1911—1921.	1901—1911.	1891—1901.	1881—1891.	
1	2	3	4	5	6	7	8	9	10	11	12
MUSALMAN ..	12,955,141	5,063	5,075	4,922	4,739	4,758	+5.5	+0.8	+12.5	+9.7	+31.2
Indo-Gangetic Plain West ..	4,491,944	1,756	1,714	1,810	1,804	1,808	+8.1	-7.5	+8.7	+9.9	+19.7
Himalayan ..	77,425	30	31	31	32	34	+4.3	-3.0	+4.0	+3.2	+9.6
Sub-Himalayan ..	3,587,246	1,402	1,468	1,512	1,652	1,692	+1.0	-5.1	-9	+7.5	+2.2
North-West Dry Area ..	4,798,526	1,875	1,862	1,569	1,251	1,224	+6.5	+16.0	+35.9	+12.6	+89.6
HINDU ..	9,125,202	3,566	3,628	4,179	4,408	4,384	+4.0	-15.2	+2.7	+10.7	+3
Indo-Gangetic Plain West ..	5,061,511	1,978	1,981	2,354	2,479	2,398	+5.7	-17.8	+2.9	+13.8	+1.7
Himalayan ..	1,642,176	642	674	646	682	703	+7	+2.0	+2.6	+6.8	+12.6
Sub-Himalayan ..	1,556,703	608	657	825	988	1,041	-2.0	-22.2	-9.5	+4.5	+27.9
North-West Dry Area ..	864,812	338	316	354	259	242	+13.1	-12.8	+48.1	+18.2	+72.6
SIKH ..	3,110,060	1,216	1,192	849	809	822	+7.9	+37.1	+13.7	+8.4	+82.3
Indo-Gangetic Plain West ..	2,189,193	856	824	648	624	670	+9.8	+24.2	+12.6	+2.5	+57.4
Himalayan ..	7,610	3	3	1	2	1	-3.6	+102.6	-6.5	+55.5	+184.0
Sub-Himalayan ..	570,703	223	234	142	161	137	+9	+61.3	-5.0	+29.7	+100.6
North-West Dry Area ..	342,498	134	131	58	22	14	+8.2	+121.4	+185.7	+78.6	+1,122.3
CHRISTIAN ..	346,259	135	83	27	21	14	+73.3	+200.0	+37.4	+72.8	+1,134.3
Indo-Gangetic Plain West ..	153,424	60	24	9	7	6	+162.4	+164.5	+40.0	+34.6	+1,208.1
Himalayan ..	4,471	2	2	1	1	2	+1.6	+28.8	-4.4	-7.0	+16.4
Sub-Himalayan ..	117,172	46	38	12	12	5	+26.6	+209.2	+11.4	+159.3	+1,030.7
North-West Dry Area ..	71,192	27	19	5	1	1	+60.5	+298.1	+395.5	+6.0	+3,254.9
JAIN ..	46,019	18	19	20	20	20	-1.6	-6.4	+9.7	+7.1	+8.1
Indo-Gangetic Plain West ..	38,213	15	16	17	17	18	-2.3	-6.6	+9.8	+4.5	+4.8
Himalayan ..	356	..	..	..	..	..	-6	-25.9	+24.5	-27.6	-33.6
Sub-Himalayan ..	6,866	3	3	3	3	2	+2.6	-8.0	+3.7	+34.1	+31.3
North-West Dry Area ..	584	..	..	..	..	..	-4.4	+77.1	+721.4	-87.1	+79.1
BUDDHIST ..	5,918	2	3	3	3	2	-23.0	+10.8	+11.3	+91.8	+82.0
Indo-Gangetic Plain West ..	190	..	..	..	..	..	+13.9	+4,300.0	..	-100.0	+18,060.0
Himalayan ..	5,718	2	3	3	3	2	-23.9	+8.5	+11.1	+91.9	+75.9
Sub-Himalayan ..	8	..	..	..	..	..	-27.3	+83.3	*	..	*
North-West Dry Area ..	2	..	..	..	..	..	-93.1	..	..	..	*
PARSI ..	598	..	..	..	..	..	-8.4	+36.9	+31.0	-11.9	+44.8
Indo-Gangetic Plain West ..	390	..	..	..	..	..	-5.3	+37.8	+14.6	+87.8	+180.6
Himalayan ..	40	..	..	..	..	..	+122.2	+157.1	-46.2	+225.0	+000.0
Sub-Himalayan ..	111	..	..	..	..	..	-27.6	+29.9	+53.9	-62.0	-44.5
North-West Dry Area ..	57	..	..	..	..	..	-19.7	+31.5	+285.7	-80.0	-18.6
JEW ..	36	..	..	..	..	..	-33.3	+50.0	-36.8	..	-36.8
Indo-Gangetic Plain West ..	31	..	..	..	..	..	+19.7	-9.7	-22.5	-18.4	-36.7
Himalayan ..	1	..	..	..	..	..	-60.7	*	-100.0	*	*
Sub-Himalayan ..	1	..	..	..	..	..	-91.1	+240.0	-54.5	+1,000.0	..
North-West Dry Area ..	3	..	..	..	..	..	-50.0	*	-100.0	-85.7	-57.1

* Note.—There being no entries in the earlier decade, no comparison is possible.

SUBSIDIARY

Distribution by districts

District or State and Natural Division.	NUMBER PER 10,000 OF THE									
	Hindu.					Musalman.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1801.	1881.
1	2	3	4	5	6	7	8	9	10	11
PUNJAB AND DELHI	3,566	3,627	4,179	4,408	4,384	5,063	5,075	4,922	4,739	4,756
PUNJAB	3,506	..	..	..	..	5,105	..	..	..	..
INDO-GANGETIC PLAIN WEST (TOTAL)	4,241	4,344	4,864	5,028	4,894	3,764	3,759	3,742	3,658	3,690
INDO-GANGETIC PLAIN WEST (PUNJAB)	4,137	..	..	..	..	3,800	..	..	..	..
1. Hissar	6,713	6,730	6,969	7,073	6,708	2,644	2,716	2,584	2,565	2,730
2. Loharu State	8,718	8,699	8,703	9,000	8,888	1,273	1,291	1,289	1,000	1,103
3. Rohtak	8,152	8,320	8,463	8,467	8,470	1,619	1,590	1,454	1,448	1,436
4. Dujana State	7,794	7,911	7,603	7,747	7,731	2,206	2,080	2,395	2,253	2,269
5. Gurgaon	6,747	6,559	6,692	6,803	6,844	3,180	3,378	3,250	3,138	3,094
6. Palauli State	8,339	8,245	8,335	8,328	8,109	1,601	1,708	1,618	1,009	1,841
7. Karnal	6,917	6,954	7,060	7,310	7,286	2,843	2,812	2,733	2,511	2,508
8. Jullundur	2,978	3,309	4,011	4,197	4,284	4,457	4,452	4,588	4,556	4,542
9. Kapurthala State	2,055	2,201	2,979	2,985	3,282	5,644	5,673	5,673	5,691	5,660
10. Ludhiana	2,387	2,540	3,997	4,286	4,448	3,400	3,404	3,505	3,494	3,457
11. Malerkotla State	3,668	3,219	4,956	5,277	2,277	3,537	3,647	3,513	3,540	3,465
12. Ferozepore	2,789	2,853	2,913	2,844	2,592	4,304	4,362	4,472	4,567	4,774
13. Faridkot State	2,563	2,869	2,864	2,875	2,830	2,975	2,848	2,882	2,988	2,992
14. Patiala State	4,281	4,006	5,514	5,953	5,008	2,203	2,184	2,238	2,223	2,190
15. Jind State	7,616	7,737	7,516	8,112	8,430	1,404	1,381	1,373	1,353	1,371
16. Nabha State	5,084	5,079	5,389	5,832	5,102	1,927	1,849	1,965	1,924	1,910
17. Lahore	2,260	2,100	2,378	2,627	2,092	5,724	6,044	6,174	5,999	6,487
18. Amritsar	2,200	2,404	2,744	2,787	2,939	4,559	4,642	4,639	4,556	4,620
19. Gujranwala	1,629	1,907	2,241	2,409	2,064	7,106	6,740	7,028	6,890	7,337
20. Sheikhupura *	1,640	..	..	..	..	6,325	..	..	..	..
HIMALAYAN	9,450	9,453	9,460	9,470	9,474	445	430	453	443	459
21. Nahan State	9,429	9,405	9,469	9,531	9,578	459	434	473	395	377
22. Simla	7,331	7,387	7,509	7,580	7,551	1,534	1,480	1,654	1,602	1,615
23. Simla Hill States	9,545	9,492	9,541	9,629	9,574	311	320	337	325	364
24. Bilaspur State	9,796	9,832	9,805	9,836	9,851	159	151	164	154	146
25. Kangra	9,428	9,413	9,407	9,378	9,409	500	504	516	520	536
26. Mandi State	9,801	9,835	9,785	9,836	9,837	187	155	183	158	159
27. Suket State	9,871	9,880	9,877	9,907	9,865	121	107	122	92	132
28. Chamba State	9,198	9,293	9,335	9,343	9,361	742	644	652	608	592
SUB-HIMALAYAN	2,666	2,736	3,309	3,506	3,617	6,144	6,119	6,062	5,867	5,880
29. Ambala	5,431	5,516	6,252	6,104	6,482	3,019	2,974	2,950	2,911	2,850
30. Kalsia State	5,014	5,480	5,750	5,843	6,149	3,555	3,366	3,263	3,057	2,944
31. Hoshiarpur	5,395	5,128	6,099	6,010	6,104	3,119	3,068	3,162	3,249	3,219
32. Gurdaspur	3,037	3,394	4,048	4,201	4,362	4,962	4,878	4,928	4,863	4,752
33. Sialkot	2,324	2,474	2,786	3,315	2,957	6,190	6,174	6,615	6,120	6,617
34. Gujrat	759	663	924	951	1,051	8,612	8,729	8,738	8,797	8,816
35. Jhelum	730	670	872	834	1,034	8,866	8,840	8,867	8,910	8,768
36. Rawalpindi	1,005	884	927	939	1,050	8,257	8,362	8,632	8,661	8,667
37. Attock †	511	380	..	..	..	9,091	9,088	..	..	..
NORTH-WEST DRY AREA	1,423	1,358	1,784	1,691	1,635	7,895	8,000	7,901	8,159	8,266
38. Montgomery	1,328	1,248	2,372	2,432	1,969	7,188	7,467	7,215	7,245	7,749
39. Shahpur	1,142	1,058	1,306	1,338	1,400	8,280	8,330	8,449	8,462	8,487
40. Mianwali ‡	1,284	1,061	1,182	..	..	8,623	8,787	8,754	..	..
41. Lyallpur ‡	1,853	1,803	2,658	..	..	6,074	6,113	6,120	..	..
42. Jhang	1,496	1,424	2,103	2,024	1,642	8,332	8,195	7,803	7,885	8,270
43. Multan	1,505	1,554	1,879	1,943	2,021	8,218	8,167	8,025	7,981	7,897
44. Bahawalpur State	1,467	1,403	1,591	1,385	1,592	8,285	8,381	8,297	8,410	8,375
45. Muzaffargarh	1,229	1,197	1,287	1,328	1,279	8,679	8,691	8,632	8,600	8,638
46. Dera Ghazi Khan	1,140	1,072	1,170	1,291	1,285	8,834	8,906	8,803	8,671	8,676
DELHI	6,669	7,140	7,409	7,501	7,511	2,904	2,612	2,428	2,345	2,325
INDO-GANGETIC PLAIN WEST	6,669	7,140	7,409	7,501	7,511	2,904	2,612	2,428	2,345	2,325
1. Delhi	6,669	7,140	7,409	7,501	7,511	2,904	2,612	2,428	2,345	2,325

NOTE.—* Sheikhupura figures for 1911, 1901, 1891 and 1881 are

† Attock figures for 1901, 1891 and 1881 are included in Jhelum

‡ Mianwali and Lyallpur figures for 1891 and 1881 are not

SUBSIDIARY TABLE

TABLE II.

of the main religions.

POPULATION WHO ARE

Christian.					Jain.					Sikh.				
1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
135	88	27	21	14	18	19	20	20	21	1,216	1,192	849	809	822
133	..	..	..	..	16	..	..	..	..	1,238	..	..	..	..
129	53	18	14	12	32	35	35	34	36	1,834	1,808	1,340	1,266	1,365
123	..	..	..	..	29	..	..	..	..	1,910	..	..	..	..
13	3	3	..	1	72	72	77	73	55	558	478	366	285	411
..	..	..	..	..	9	10	8	..	8	..	..	..	..	..
180	6	1	1	1	91	81	81	81	90	..	3	1	3	1
..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
19	12	4	2	1	40	45	52	55	59	14	5	1	2	2
..	5	..	..	4	60	42	47	63	45	..	..	..	..	..
41	12	13	2	1	51	53	54	59	75	148	169	139	118	129
59	30	19	18	21	9	11	11	8	9	2,506	2,198	1,371	1,221	1,144
39	4	1	0	1	8	8	7	6	8	2,254	2,024	1,339	1,318	1,049
28	17	14	6	5	32	36	33	31	35	4,153	4,003	2,450	2,183	2,065
5	2	2	2	0	73	178	175	168	186	2,717	2,954	1,354	1,007	4,072
49	35	20	20	26	11	15	11	16	12	2,757	2,735	2,382	2,553	2,595
7	0	1	1	0	31	31	33	35	36	4,424	4,252	4,221	5,060	4,142
9	5	2	1	0	22	23	18	20	20	3,485	3,781	2,227	1,892	2,781
21	7	3	0	0	50	45	45	6	26	909	830	1,063	628	173
2	..	..	..	1	11	10	16	14	14	2,976	3,062	2,630	2,230	2,967
411	210	63	51	50	11	11	9	8	10	1,591	1,631	1,374	1,414	1,359
137	54	20	16	10	15	16	14	7	3	3,088	2,883	2,582	2,634	2,422
438	176	36	34	3	12	10	12	10	9	815	1,167	682	657	686
448	..	..	..	..	1	..	0	..	..	1,586	..	..	..	..
26	26	20	22	25	2	2	3	2	3	44	45	28	25	17
3	3	3	2	2	5	3	4	1	1	103	155	51	71	42
844	932	693	689	781	20	12	8	9	5	259	176	135	116	47
5	7	4	2	2	5	5	9	7	15	67	89	35	37	45
..	..	..	..	..	..	1	..	..	..	45	16	31	10	..
5	5	5	4	4	1	1	1	2	1	27	25	16	19	10
..	..	..	1	1	..	..	..	..	..	8	1	2	..	3
..	..	..	1	..	..	..	..	..	..	8	13	1	..	2
5	0	5	5	7	..	..	..	..	..	17	10	6	7	6
201	159	48	42	17	12	12	12	11	9	977	974	568	574	477
83	108	53	50	35	33	32	32	27	12	1,433	1,369	712	906	641
1	6	..	..	..	33	28	27	31	32	1,397	1,120	960	1,069	875
40	32	8	1	1	12	11	12	11	12	1,434	1,461	719	699	663
386	279	47	25	6	..	1	1	1	1	1,615	1,417	976	909	872
664	496	110	104	15	23	21	19	15	14	799	835	470	445	397
29	8	6	1	4	..	1	..	..	..	69	599	332	250	129
9	9	5	4	7	4	3	2	3	1	391	478	254	249	190
163	152	82	80	47	17	19	11	10	13	557	581	346	310	217
11	14	..	..	..	..	..	..	..	..	387	518	..	..	..
117	79	23	6	7	1	1	1	..	1	564	562	291	143	91
146	11	1	2	2	..	..	..	..	..	1,338	1,274	412	321	280
156	125	2	2	1	..	..	..	..	..	422	487	243	198	111
10	5	1	..	..	..	1	1	..	..	83	143	62	..	..
429	373	110	..	..	2	1	..	..	..	1,642	1,710	1,112	..	..
8	4	1	1	..	..	..	..	..	..	164	377	93	90	88
67	30	28	30	34	..	5	2	..	1	207	214	66	45	38
4	3	1	..	..	..	..	..	..	4	244	213	111	205	29
6	1	1	1	1	..	..	..	..	..	86	111	80	71	82
1	1	3	3	2	6	..	3	..	..	11	20	21	35	37
273	87	46	29	31	96	115	112	119	114	57	45	4	6	15
273	87	46	29	31	96	115	112	119	114	57	45	4	6	15
273	87	46	29	31	96	115	112	119	114	57	45	4	6	15

Included in districts of Lyallpur, Gujranwala, Lahore and Sialkot.
and Rawalpindi Districts.
available.

SUBSIDIARY TABLE III.

Christian, Number and Variation.

District or State and Natural Division.	ACTUAL NUMBER OF CHRISTIANS IN					VARIATION PER CENT.				
	1921.	1911.	1901.	1891.	1881.	1911— 1921.	1901— 1911.	1891— 1901.	1881— 1891.	1881— 1921.
1	2	3	4	5	6	7	8	9	10	11
PUNJAB AND DELHI ..	346,259	199,751	66,591	48,472	28,054	+73.3	+200.0	+37.4	+72.8	+1,134.2
PUNJAB ..	332,939	..	..	..	..	+71.6	..	..	..	..
INDO-GANGETIC PLAIN WEST (TOTAL) ..	153,424	58,462	22,103	15,785	11,729	+162.4	+164.5	+40.0	+34.6	+1,208.1
INDO-GANGETIC PLAIN WEST (PUNJAB) ..	140,104	..	..	..	..	+165.5	..	..	..	..
1. Hissar ..	1,024	273	253	242	72	+275.1	+7.9	+4.5	+236.1	+1,322.2
2. Loharu State ..	..	..	..	..	..	..	..	..	..	..
3. Rohtak ..	10,033	334	80	65	34	+2,903.9	+317.5	+45.5	+61.8	+29,408.8
4. Dujana State ..	..	..	..	..	..	..	..	..	..	..
5. Gurgaon ..	1,316	782	278	152	70	+68.3	+181.3	+82.9	+117.1	+1,780.0
6. Pataudi State ..	..	9	..	..	7	-100.0	..	..	-100.0	-100.0
7. Karnal ..	3,382	920	1,179	120	85	+267.6	-22.0	+882.5	+41.2	+3,878.8
8. Jullundur ..	4,088	2,404	1,713	1,645	1,631	+70.0	+40.3	+4.1	+9	+150.6
9. Kapurthala State ..	1,100	107	39	8	35	+928.0	+174.4	+387.5	-77.1	+3,042.9
10. Ludhiana ..	1,613	888	947	372	322	+81.6	-6.2	+154.6	+15.5	+400.9
11. Malerkotla State ..	37	14	12	15	3	+164.3	+16.7	-20.0	+400.0	+1,133.3
12. Ferozepore ..	5,365	3,342	1,908	1,738	1,686	+60.5	+75.2	+9.8	+3.1	+218.2
13. Faridkot State ..	107	6	11	13	..	+1,683.3	-45.5	-15.4	..	..
14. Patiala State ..	1,395	739	316	105	39	+88.8	+133.9	+201.0	+169.2	+3,476.9
15. Jind State ..	637	187	80	7	3	+240.6	+133.8	+1,042.9	+133.3	+21,133.3
16. Nabha State ..	41	5	7	10	18	+720.0	-28.6	-30.0	-44.4	+127.8
17. Lahore ..	46,454	21,781	7,296	5,483	4,644	+113.3	+198.5	+33.1	+18.1	+900.3
18. Amritsar ..	12,773	4,763	2,078	1,609	869	+168.2	+129.2	+29.1	+85.2	+1,369.8
19. Gujranwala ..	27,308	16,215	2,748	2,353	194	+68.4	+490.1	+16.8	+1,112.9	+13,976.2
20. Sheikhupura* ..	23,431	..	..	..	..	..	..	..	..	..
HIMALAYAN ..	4,471	4,400	3,415	3,571	3,840	+1.6	+28.8	-4.4	-7.0	+16.4
21. Nahan State ..	44	37	46	25	21	+18.9	-19.6	+84.0	+19.0	+109.5
22. Simla ..	3,823	3,666	2,798	3,078	3,353	+4.3	+31.0	-9.1	-8.2	+14.0
23. Simla Hill States ..	164	213	112	45	47	-23.0	+88.5	+151.1	-4.3	+248.9
24. Bilaspur State ..	4	11	1	..	..	-63.6	+1,000.0	..	..	..
25. Kangra ..	363	386	385	343	327	-6.0	+3	+12.2	+4.9	+11.0
26. Mandi State ..	10	4	3	12	12	+150.0	+33.3	-75.0	..	-16.7
27. Suket State ..	..	2	..	3	..	-100.0	..	-100.0	..	..
28. Chamba State ..	63	81	70	65	80	-22.2	+15.7	+7.7	-18.8	-21.2
SUB-HIMALAYAN ..	117,172	92,524	29,930	26,867	10,363	+26.6	+209.1	+11.4	+159.3	+1,030.7
29. Ambala ..	5,679	7,183	4,362	5,204	3,773	-24.1	+71.5	-16.2	+37.9	+50.5
30. Kalsia State ..	4	31	..	3	1	-87.1	..	-100.0	+200.0	+300.0
31. Hoshiarpur ..	3,745	2,978	813	120	98	+25.8	+266.3	+577.5	+22.4	+3,721.4
32. Gurdaspur ..	32,832	23,365	4,471	2,400	463	+40.5	+422.6	+86.3	+418.4	+6,991.1
33. Sialkot ..	62,266	48,620	11,939	11,668	1,535	+28.1	+307.2	+2.3	+660.1	+3,956.4
34. Gujrat ..	2,373	570	460	114	255	+316.3	+23.9	+303.5	-55.3	+830.6
35. Jhelum ..	430	450	271	253	416	-4.4	+66.1	+7.1	-39.2	+3.4
36. Rawalpindi ..	9,286	8,320	7,614	7,105	3,822	+11.6	+9.3	+7.2	+85.9	+142.9
37. Attock† ..	557	707	..	..	..	-21.2	..	..	..	..
NORTH-WEST DRY AREA ..	71,192	44,365	11,143	2,249	2,122	+60.5	+298.1	+395.5	+6.0	+3,254.9
38. Montgomery ..	10,408	581	66	85	93	+1,691.4	+780.3	-22.4	-8.6	+11,091.4
39. Shahpur ..	11,270	8,616	91	80	29	+30.8	+9,368.1	+13.8	+175.9	+38,762.1
40. Mianwali‡ ..	369	168	44	..	..	+119.6	+281.8	..	..	..
41. Lyallpur† ..	42,004	32,023	8,672	..	..	+31.2	+269.3	..	..	..
42. Jhang ..	449	201	33	37	11	+123.4	+428.9	+2.7	+236.4	+3,961.8
43. Multan ..	6,006	2,441	1,964	1,892	1,861	+146.0	+24.3	+3.8	+1.7	+222.7
44. Bahawalpur State ..	283	199	83	11	13	+42.2	+139.8	+654.5	-15.4	+2,076.9
45. Muzaffargarh ..	356	60	33	27	33	+493.3	+81.8	+22.2	-18.2	+978.8
46. Dera Ghazi Khan ..	47	76	152	117	82	-38.2	-50.0	+29.9	+42.7	-42.7
DELHI‡ ..	13,320	..	..	..	..	..	..	..	..	..
INDO-GANGETIC PLAIN WEST ..	13,320	..	..	..	..	..	..	..	..	..
1. Delhi ..	13,320	..	..	..	..	..	..	..	..	..

NOTE —*Sheikhupura figures for 1881, 1891, 1901 and 1911 are included in those of Gujranwala, Lyallpur and Sialkot.

†Figures of 1881, 1891 and 1901 are included in Jhelum and Rawalpindi Districts.

‡Figures of 1881 and 1891 are not available.

§Figures for Delhi province as now constituted are not available for previous censuses.

SUBSIDIARY TABLE IV.										
Religions of Urban and Rural Population.										
Natural Division.	NUMBER PER 10,000 OF URBAN POPULATION WHO ARE					NUMBER PER 10,000 OF RURAL POPULATION WHO ARE				
	Hindu.	Musalman.	Christian.	Jain.	Sikh.	Hindu.	Musalman.	Christian.	Jain.	Sikh.
1	2	3	4	5	6	7	8	9	10	11
PUNJAB	4,021	5,060	205	83	628	3,446	5,110	124	9	1,308
I.—Indo-Gangetic Plain West	4,156	4,888	145	99	709	4,134	3,629	119	18	2,100
II.—Himalayan ..	7,178	1,846	672	27	262	9,526	398	4	1	36
III.—Sub-Himalayan ..	3,482	5,381	399	103	633	2,581	6,221	180	3	1,012
IV.—North-West Dry Area ..	3,793	5,689	123	9	385	1,236	8,069	117	..	578
DELHI	5,726	3,768	289	127	87	8,230	1,472	246	46	5
I.—Indo-Gangetic Plain West	5,726	3,768	289	127	87	8,230	1,472	246	46	5

CHAPTER V.

Age.

SECTION I.—THE AGE RETURNS.

114. Instructions to enumerators. 115. The actual ages returned at the Census, and comparison with 1911. 116. Comparison of Punjab (unselected), English (selected) and American (unselected) longevity. 117. The "Stationary" Population. 118. Persons over 40 years of age in various castes.

SECTION II.—VITAL STATISTICS.

119. Births and Deaths. 120. Ratio of female to male births. 121. Deaths in the Punjab, 1867—1921. 122. Deaths in Punjab Jails.

Section I.—The Age Returns.

Instructions
to Enumera-
tors.

114. The Instructions to enumerators which were printed on the cover of the enumeration book state "Column 7 (age)—Enter the number of years each person has completed. For infants less than one year, enter the word 'infant.'" The actual procedure adopted appears to have introduced at least 4 classes of cases. These were—

- (1) Cases in which the person questioned gave his age at a figure which appeared reasonable to the enumerator.
- (2) Cases in which the given age seemed improbable, and the enumerator then either put down the age estimated by himself or questioned some of the bystanders.
- (3) Cases in which the person questioned gave two alternative ages, almost always differing by an even number, and the enumerator was left to make his own choice between them.
- (4) Cases in which the enumerator questioned a third party, usually the head of the house, as to the ages of his family and, where, often the enumerator had no means of applying even the roughest check to the replies given.

Though the manner of obtaining the record of ages for entry in the census schedules, was thus, in itself, responsible for heterogeneity, it is doubtful whether any systematic procedure, with the material at present available, would produce any betterment of the returns. To record only the ages given by the persons questioned might make the returns even more inaccurate than they are. To record only the ages as estimated by the enumerators would certainly lead to large errors due to "personal equation." Possibly a definite instruction to the effect that where two ages are given (*e. g.*, 20 or 22 years, 60 or 70 years) the mean age, or the whole number next below the mean age, where the mean is a fraction, might help to limit the individual initiative of enumerators: but even this would be unlikely to lead to any appreciable improvement. The difficulties in the way of obtaining anything approaching the actual age-distribution of the population are thus almost insuperable, and no surprise need be felt at the abandonment by the actuary (Mr. Acland), at the 1911 Census, of the task of graduating the female returns, which are more entangled than even those of the males.*

The actual
ages returned
at the Census
and compari-
son with
1911.

115. If we look at a histogram showing the frequency of the age-groups returned in the Punjab for each year of age, it must be admitted that it resembles the forest of factory chimneys of some big industrial town, rather than the falling outline of some smooth hill, whose curves swing easily down to the plain.

The outstanding chimneys are placed where those whose ages (at the last birthday), are recorded as a multiple of ten. The secondary chimneys are those for ages which are multiples of five, though that for age 25 actually overtops that for age 20, both for males and females. Smaller, but still prominent smoke-stacks arise at ages 12, 22, 32, 42, 52, 62 and 72, and so on down to the ages which terminate with a seven or unity, represented by the smallest of elevations.†

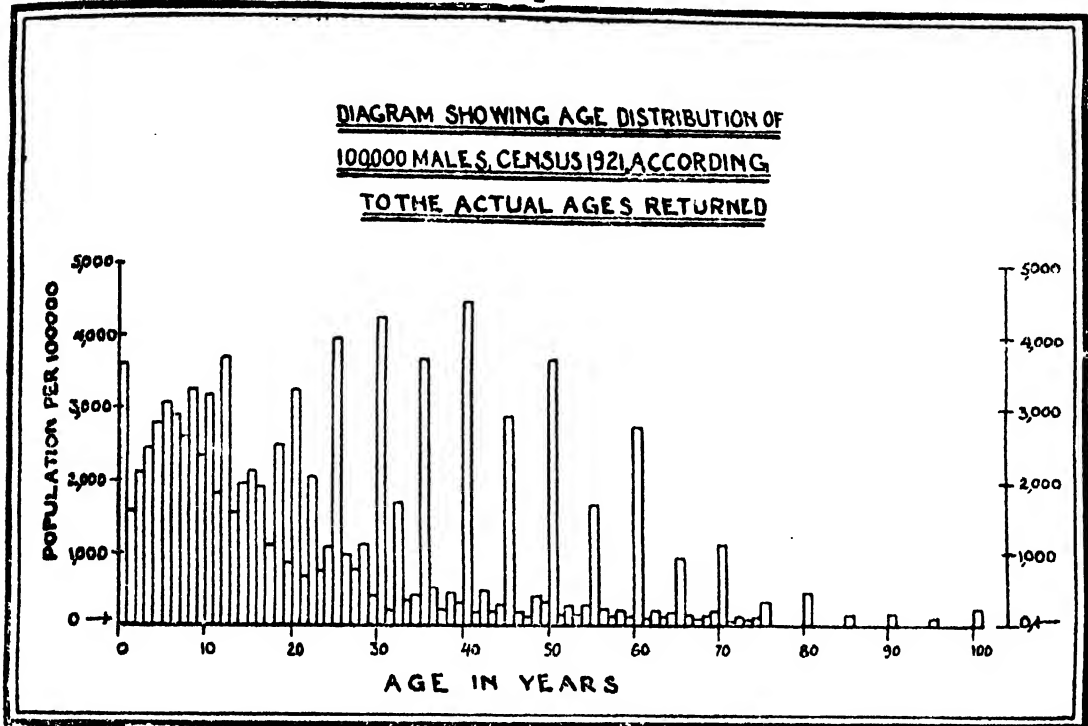
*No doubt as life insurance operations extend, it will be possible to get a clearer view of the age-distribution, but this can hardly help matters for many years to come. In the meantime the annual vital statistics might well contain the recorded deaths by each year of age, as this, with the recorded number of births, after correcting for the effects of migration, would allow of an independent calculation of the age-distribution.

†Mr. Acland in commenting on the preference for certain digits in the unit place to express ages, puts the order of preference as 0, 5, 2, 8, 6, 4, 3, 7, 1, 9.

In the Punjab the order would agree with this for the younger ages, but in the higher ages 9 is preferred in the unit place to either 7 or 1. The reluctance of an old man to enter a new decade might account for this phenomenon, if it is not the result of random sampling.

Truly over all these statistics of age hangs a dense curtain of fog and murkiness produced by those tall smoke-belching chimneys.

Diagram 35.



The great irregularity of the data is illustrated by the above diagram, which shows the recorded ages for each year, for males. The data for females are very similar, possibly due in part to the fact that the women's ages are very largely, if not wholly, the ages which the men select for them, and they naturally tend to choose the same ages for their womenfolk as they do for themselves.*

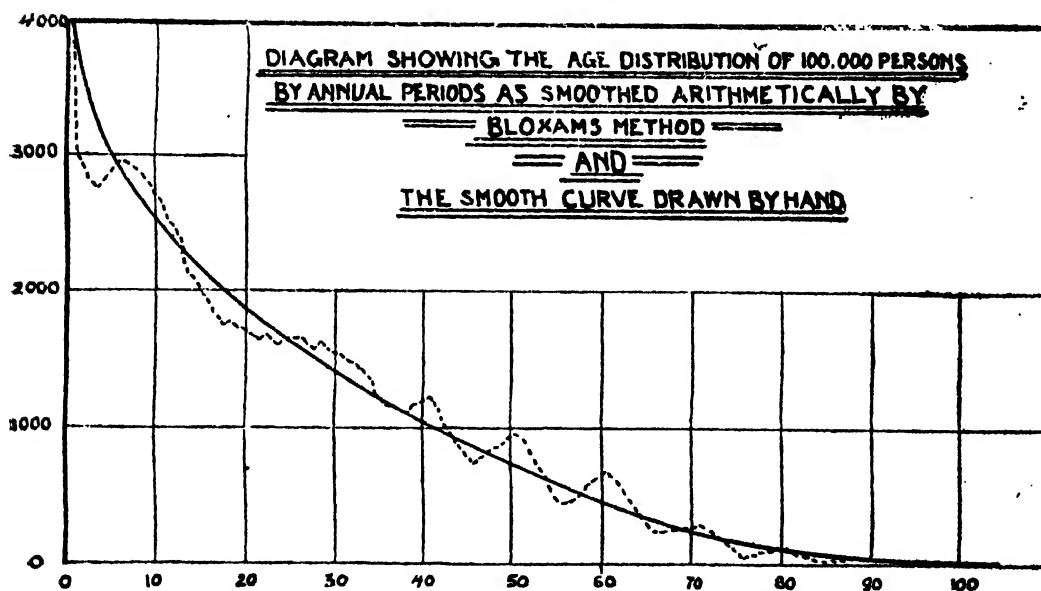
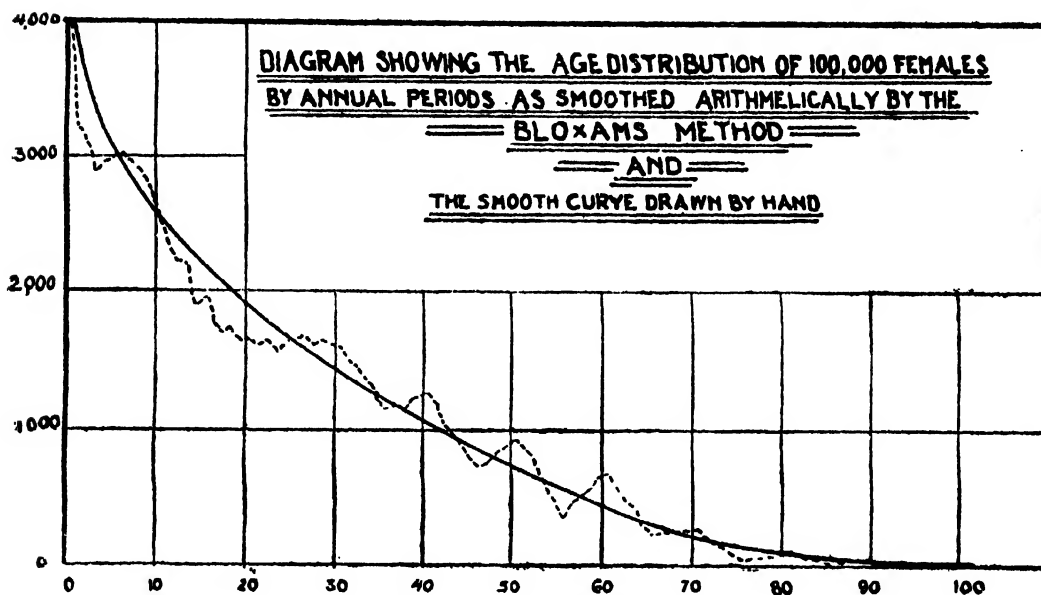
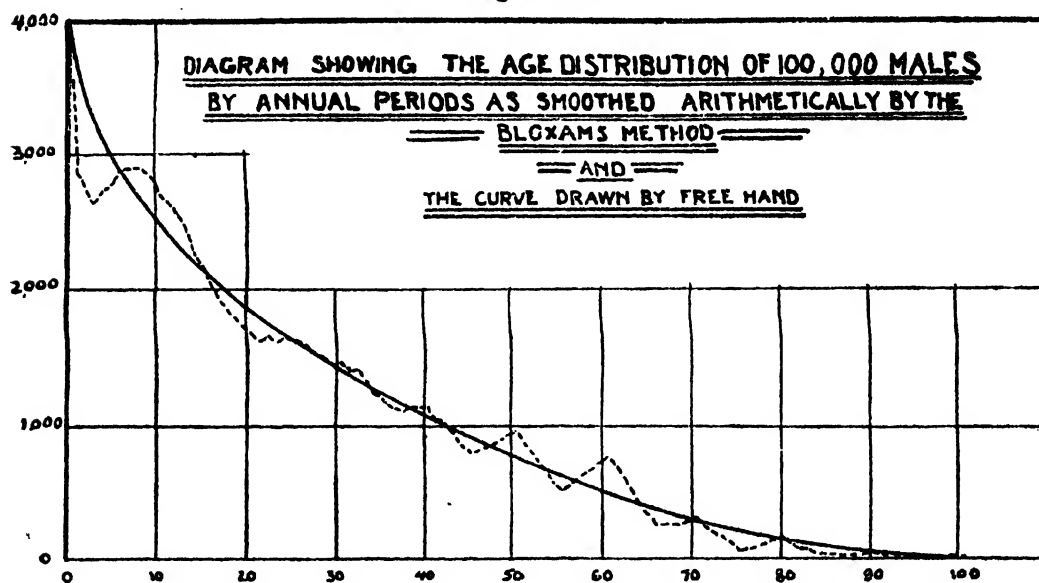
As so much uncertainty attaches to the age-distribution figures, it is of little use discussing them in detail until they have been graduated by the Government Actuary, and as his Report on the Punjab figures will not be available till after this Report has gone to press, the remarks made must not be interpreted as expressing any conviction on my part.

For form's sake I have had the age figures doubly smoothed by Bloxam's method, smoothed again by curve-drawing, as was done in 1911, and then given a final smoothing by adjusting the second differences. The results, which are exhibited in the diagrams on the opposite page, have a spurious appearance of validity, which is, in reality, quite illusive. One obvious defect from which the curves suffer is that they do not possess any points of inflexion, so that they differ, in this respect, from some properly constructed tables. For example, the Punjab Life Table, P Males, for 1911, has a point of inflexion at 38 years, the Agra and Oudh Tables for 1911 for Males and for Females, have points of inflexion at 29 and 28 years, respectively, while the American Experience Table has two points of inflexion.†

*In this connection it is noteworthy that according to Knibbs (page 112 of Appendix A to the Census of the Commonwealth of Australia 1911) "inaccuracy of statement is more marked amongst the males than amongst females." The argument is based on the ratio of the recorded to the adjusted number of persons for each age unit.

†Makeham's law $l_x = k s^x g^x$ which is often used for graduating life-tables, leads to a curve with two points of inflexion, and there is no reason so far as I am aware, if the force of mortality at different ages varies enough, why there should not be several such points even in a "stationary" population. If there are more than 2 points of inflexion, Makeham's law will be, *pro tanto*, unsatisfactory.

Diagram 36.



The observed numbers in the age-groups, and the smoothed values per 100,000 males, are reproduced in the statement below :—

Statement showing the age-distribution of 100,000 males by annual periods and their smoothing by Bloxam's method from Subsidiary Table I, Chapter V.

Age.			Number per 100,000 males.	First smoothing (Bloxam).	Second smoothing (Bloxam).	Final smoothing from curve and adjusted differ- ences.
0	..	..	3,583	3,583	3,583	3,807
1	..	..	1,670	2,488	2,872	3,379
2	..	..	2,210	2,546	2,764	3,207
3	..	..	2,517	2,477	2,617	3,045
4	..	..	2,752	2,725	2,722	2,921
5	..	..	3,227	2,848	2,798	2,807
6	..	..	2,921	3,014	2,889	2,712
7	..	..	2,825	2,925	2,889	2,626
8	..	..	3,344	2,932	2,899	2,550
9	..	..	2,309	2,724	2,810	2,474
10	..	..	3,269	2,902	2,729	2,408
11	..	..	1,874	2,569	2,607	2,341
12	..	..	3,713	2,519	2,533	2,283
13	..	..	1,681	2,323	2,399	2,226
14	..	..	2,059	2,353	2,284	2,169
15	..	..	2,288	2,233	2,132	2,112
16	..	..	2,024	1,992	2,055	2,055
17	..	..	1,111	1,758	1,917	1,998
18	..	..	2,477	1,941	1,840	1,941
19	..	..	888	1,659	1,743	1,884
20	..	..	3,203	1,852	1,700	1,827
21	..	..	616	1,505	1,655	1,770
22	..	..	2,074	1,515	1,684	1,713
23	..	..	743	1,714	1,623	1,665
24	..	..	1,087	1,803	1,652	1,617
25	..	..	4,051	1,549	1,646	1,669
26	..	..	1,059	1,648	1,612	1,522
27	..	..	805	1,515	1,532	1,475
28	..	..	1,240	1,515	1,539	1,436
29	..	..	420	1,401	1,492	1,398
30	..	..	4,303	1,585	1,472	1,360
31	..	..	239	1,414	1,425	1,322
32	..	..	1,724	1,415	1,422	1,284
33	..	..	384	1,312	1,323	1,246
34	..	..	426	1,386	1,261	1,208
35	..	..	3,788	1,088	1,196	1,170
36	..	..	609	1,105	1,178	1,132
37	..	..	234	1,089	1,126	1,103
38	..	..	466	1,222	1,146	1,074
39	..	..	352	1,127	1,150	1,045
40	..	..	4,448	1,189	1,152	1,016
41	..	..	136	1,123	1,066	988
42	..	..	545	1,101	1,001	960
43	..	..	134	789	908	932
44	..	..	242	802	878	904
45	..	..	2,886	726	773	876
46	..	..	204	772	805	848
47	..	..	165	778	831	820
48	..	..	361	949	881	792
49	..	..	274	931	911	764
50	..	..	3,739	974	936	732
51	..	..	114	922	844	704
52	..	..	384	903	757	676
53	..	..	99	489	650	448
54	..	..	179	495	556	620
55	..	..	1,671	439	470	592
56	..	..	144	452	518	561
57	..	..	100	477	562	536
58	..	..	166	727	622	508
59	..	..	303	717	675	480
60	..	..	2,920	737	716	456
61	..	..	97	719	628	432
62	..	..	200	682	540	408
63	..	..	76	283	441	384
64	..	..	117	277	346	362
65	..	..	926	244	258	348

Age.				Number per 100,000 males.	First smoothing (Bloxam).	Second smoothing (Bloxam).	Final smoothing from curve and adjusted differ- ences.
66	..	..	..	64	243	257	324
67	..	..	..	37	241	256	305
68	..	..	..	70	281	264	286
69	..	..	..	107	273	270	267
70	..	..	..	1,128	283	274	249
71	..	..	..	22	274	237	230
72	..	..	..	88	260	201	211
73	..	..	..	27	93	160	192
74	..	..	..	33	93	121	176
75	..	..	..	290	79	85	162
76	..	..	..	21	81	90	148
77	..	..	..	19	77	95	134
78	..	..	..	36	119	102	124
79	..	..	..	13	117	108	114
80	..	..	..	505	117	115	104
81	..	..	..	13	111	96	95
82	..	..	..	19	111	78	86
83	..	..	..	7	25	58	77
84	..	..	..	9	24	40	68
85	..	..	..	78	21	22	59
86	..	..	..	5	20	22	50
87	..	..	..	4	18	22	43
88	..	..	..	3	25	23	38
89	..	..	..	2	25	24	33
90	..	..	..	111	25	25	29
91	..	..	..	6	26	22	27
92	..	..	..	4	26	19	25
93	..	..	..	5	9	16	23
94	..	..	..	3	9	12	21
95	..	..	..	29	8	8	19
96	..	..	..	2	8	8	17
97	..	..	..	3	8	8	15
98	..	..	..	2	7	9	13
99	..	..	..	4	8	9	11
100	..	..	..	23	12	10	9
Over 100	..	..	..	9	9	9	7

The smoothed values for females, and for males and females together, have been calculated, but are not printed here, as the process adopted, has neither scientific validity*, nor, apparently, the sanction of actuarial usage.

We may pass on, then, to consider how the recorded ages by years differ from those given in 1911. Reference may be made to Subsidiary Table XI, which contains for each year of age the ratio of the number of males, females and persons per 100,000 as recorded in 1911 to the corresponding figures for 1921. A few salient points may be noticed. In the first place the ratios differ from unity, sometimes by a good deal, and there is a tendency for the ratios to be above or below unity for a number of consecutive ages. Thus for ages 4 to 11 (inclusive) fewer persons per 100,000 were recorded in 1911 than in 1921. From 12 to 51 there are more persons in 1911 than in 1921, while from 52 years and upwards till the age of 85 is recorded, there were again fewer persons in 1911 than in 1921. The possibility that there is a falling off in 1921 in the preference for the ages which are multiples of ten is suggested, but on the whole it is difficult to say whether the differences in the recorded ages are the result of the differential birth-rates n and $n+10$ years ago, respectively, or of any change in the aptitude for misstatement which is a feature of all age-relations. The question could only be answered if the number of survivors for each year of age at each of the last 2 censuses, were calculated directly from the birth returns, and from the deaths each year *at each year of age*. A comparison of the ratio of the number of survivors so determined with the ratios of the recorded number of persons as given in Subsidiary Table XI, would show to what extent the variation of the ratios from unity is a physiological or a psychological characteristic.

*The effect of the smoothing produced by a double application of Bloxam's method is so great that, applying the process to the data of the 1881 and 1891 censuses, and adopting the smoothed results reached by the same method in 1901, there is no appreciable difference between the age-curves of any of the last 4 censuses. One only has to look at the varying number of births from year to year, to which has to be added the effect of a differential mortality, to realise how unlikely such correspondences would be.

116. There are many ways of summarising the results of a Life Table, so as to compare the chances of life of one population with that of another. The readiest way of doing so is to compare the expectations of life in the two communities. Two expectations may be made use of, (1) the actuarial expectation, which is the ratio of the number of persons of age x and over, to the number who reach age x , or what is the same thing, the average number of years lived by persons who reach age x ; (2) the median expectation, which is the number of years after which a person is just as likely to be alive or dead, or, in other words, is that number of years for which it is an even contingency that a person will survive or die.

Comparison of Punjab (unselected) English (selected) and American (unselected) longevity.

EXPECTATIONS OF LIFE.

Median Expectation.		
Age.	Punjab Life Table Males, Census 1911.	British Officers O. M. (6) Table.
0	8.97	
10	29.68	54.30
20	22.03	45.91
30	19.30	37.37
40	15.63	28.95
50	12.77*	20.90*

the most emphatic warning, that, whereas the English data are based on the experience of insured lives in 60 British life-insurance companies from 1863—1893, and are, therefore, *selected* lives, the Punjab data (taken from Table P. Life Table Punjab, Males in the Actuarial Report on Chapter V, Age, of the Census of India 1911, Volume I, page 187) are based on unselected lives, and that the latter are, therefore, subject to much greater rates of mortality. The figures are given in the margin.

Probably a comparison of the Mortality Table for the North-Eastern States

ACTUARIAL EXPECTATION OF LIFE IN THE PUNJAB AND IN AMERICA.

Age.	Expectation.	
	Punjab Life Table Males, Census 1911.	North Eastern States, Mortality Table (1908-1912).
0	21.23	50.41
10	31.38	51.97
20	26.72	43.36
30	21.60	35.49
40	17.55	27.96
50	14.15	20.76

of America, constructed by Robert Henderson on the census returns of 1900 and 1910 of the New England States, the 3 Middle Atlantic States, New York, New Jersey and Pennsylvania,† which appears to deal with unselected‡ lives, may be more appropriately used for comparative purposes. The figures for the life table expectation are noted in the margin. Striking as the difference is between the expectations for the Punjab and for American lives, one must be cautious in assuming that the differences of the mean durations of life are real, in view, particularly, of the inaccuracy of the Punjab returns; though the whole of the differences could hardly be explained on this basis.

The "Stationary" Population.

117. In actuarial language a "stationary" population is one in which the numbers of persons entering and leaving each age-group at each moment, is constant. It corresponds, in fact, to a state of steady flow in hydrodynamics. In particular, in a "stationary" population the number of births from moment to moment must be invariable, or, at least, invariable within the limits of the discrete intervals chosen for the age-groups. This is of course a state of affairs never realised in population statistics, and until actuarial calculations have formed this stationary population our discussion of the comparative numbers of persons in the age-groups at different censuses will be of but slender value. We want, indeed, to trace the history of the persons born each year, and find out how many of them are alive in each subsequent year. For this purpose we should keep our eyes on the "natural" population, and follow it through all its vicissitudes of migration up to the time of death.

In the table that follows no attempt has been made to allow for the effects of migration, and the figures quoted are simply the smoothed age-groups, altered

*The values given are those found by interpolation in the life-tables, using first differences only.

†Given on page 107 of "Mortality Laws and Statistics". R. Henderson, New York, John Wiley and Sons, London, Chapman and Hall, 1915. It should be noted that the death returns used are those of the years 1908—1912 inclusive.

‡The terms "selected" and "unselected" are used here in the sense that impaired lives are excluded or included as the case might be. The actuarial reports on the Provincial Census figures are based on the ages of selections of 100,000 or 200,000 persons out of each province, but this selection has no reference at all to the state of health of the persons selected. It is a pure compilation selection.

In the case of the present 1921 census, the compilation was made for 100,000 of each sex for each of the 3 main religions, Musalman, Hindu and Sikh, the selections being made, though not consistently, from the schedules of those districts in which the particular religious group predominated. Thus Hindus, of both sexes, were selected from the Eastern and Western Punjab. Musalmans, of both sexes, were taken from the Western and Eastern Punjab, and Sikhs, of both sexes, from the Central Punjab. Actually, the selection was even more strictly local than even this explanation shows, as, for example, Western Musalmans were all derived from the Attock district, while Eastern Hindus were all chosen from the Kangra district.

In each census in the proportion requisite to make the total number of persons equal to the adjusted total population as given in Imperial Table II, for the Punjab, as at present constituted, and Delhi. The process, though a rough one, makes a comparison possible between the numbers in the age-groups, in one census and another.

Smoothed figures by quinquennial age-groups of the total population of the Punjab and Delhi at the respective censuses. The population figures are taken from Table II.

Age-period.	1881.	1891.	1901.	1911.	1921.
Population, Punjab and Delhi	21,151,002	23,288,248	24,772,034	24,204,814	25,589,248
0—4	3,110,480	3,980,358	3,753,335	3,667,392	3,956,993
5—9	2,654,276	3,267,458	3,277,912	3,227,305	3,323,874
10—14	2,384,701	2,792,191	2,852,535	2,811,668	2,901,795
15—19	2,125,494	2,435,743	2,502,425	2,493,828	2,506,096
20—24	1,887,024	2,114,936	2,201,956	2,200,435	2,215,916
25—29	1,658,922	1,841,658	1,926,712	1,907,044	1,952,116
30—34	1,451,557	1,568,379	1,676,489	1,638,102	1,688,317
35—39	1,264,929	1,306,983	1,426,267	1,369,160	1,450,898
40—44	1,078,300	1,093,113	1,188,556	1,124,667	1,239,868
45—49	912,407	903,006	988,378	929,073	1,055,198
50—54	777,620	736,663	800,711	733,478	870,538
55—59	653,200	594,083	650,578	586,783	712,259
60 and over	1,202,716	739,039	1,503,836	1,430,283	1,719,973

NOTE.—Figures against 60 and over have not been smoothed.

From this table we may construct a rough “stationary” population and compare it with the Table P, for Males, prepared by the Actuary for the Census of 1911.

					1	2	3
					Population in thousands.	Adjusted to give same total as in Table P.	Actual figures in Table P.
Ages 0—4	at	Census	1881	.. .. .	3,110	289	318
„ 10—14	„	„	1891	.. .. .	2,792	260	239
„ 20—24	„	„	1901	.. .. .	2,202	204	198
„ 30—34	„	„	1911	.. .. .	1,638	152	155
„ 40—44	„	„	1921	.. .. .	1,240	115	111
					10,982	1,020	1,021

The want of agreement between column 2 and column 3 shows how unwise it is to proceed to comparisons without having fully adjusted life-tables at our command. The difference seems large even admitting that the comparison is not *in pari materia*, as Mr. Acland's table was, of course, constructed without the help of the statistics of the 1921 Census, and of the birth and death records of the last decade.

The last point to be noted in this connection is that the “stationary” population for which the age-group frequencies are given in column 2 above, is that obtained by following the life-history of the persons between 0 and 4 at the Census of 1881, and observing how many of them are alive at each subsequent census. This, of course, gives us a death-rate applicable to persons aged 0 in 1881, aged 1 year in 1882, 2 years in 1883, and so on, which may be very different from the mortality found for ages 0, 1, 2, and so on, in 1921, or in the decade 1911 to 1921. It would be wrong, therefore, to apply these results, quite apart from their palpable defects, in determining the actual rates of mortality prevailing at the present moment. This of course, is the information, Life Insurance Companies want, and for this they must await the publication of the Actuary's report.

118. The marginal table shows the number of males and females over 40, ^{Persons over 40 years of age in various Punjab Castes, and also a comparison between the number of persons over 40 in the various castes at the 1911 Census with that of 1921. On the face of it, it seems as if the criminal and menial (*kamin*) classes had an early mortality which left them with comparatively few people over 40, but this presumption would have to be tested by excluding the possibility of a recent more rapid increase in the births of the criminals and menials, and also by examining the likelihood of these classes understating their age more frequently than the higher}

Table showing the order of number of persons *per mille* over 40 years of age in principal castes of the Punjab, Subsidiary Table 4, Chapter V.

No.	Castes.	Class.	1921.		No. of persons over 40 <i>per mille</i> .	
			No. of males.	No. of females.	1921.	1911.
1	Kanet (H.)	Middle class hill tribe.	260	256	260	253
2	Brahman (H.)	Higher and well-to-do.	256	248	252	247
3	Khatris (H. S.)	" "	244	245	247	235
4	Kashmiri (M.)	" "	237	245	240	237
5	Sayad (M.)	" "	241	234	233	231
6	Mughal (M.)	" "	240	231	236	230
7	Dagi or Koli (H.)	Low class hill tribe.	225	241	235	245
8	Rajput (H. M.)	Higher and well-to-do.	238	232	235	226
9	Harni (M.)	Criminal	235	216	232	205
10	Jat (H.M.S.)	Higher and well-to-do.	237	231	234	226
11	Quraishi (M.)	" "	238	229	234	228
12	Pathan (M.)	" "	235	225	224	220
13	Ahir (H.)	" "	224	223	224	216
14	Biloch (M.)	" "	230	219	225	225
15	Pakhiwara (M.)	Criminal	237	208	223	222
16	Khokhar (M.)	Higher and well-to-do.	232	211	222	219
17	Sansj (H.)	Criminal	235	208	221	218
18	Chamar (H.S.)	Labouring	219	208	211	205
19	Teli (M.)	" "	212	209	211	209
20	Qasab (M.)	" "	211	201	206	201
21	Mussali (M.)	Low class	215	186	201	196
22	Bawaria (H.)	Criminal	210	186	201	188
23	Chuhra (H.S.)	Low class	203	185	191	186
24	Mahtam (S.)	" "	205	170	188	180
25	Dhanak (H.)	" "	197	169	183	191
26	Meo (M.)	" "	176	182	179	200

H.=Hindu, M.=Musalman, S.=Sikh.
Average for the Punjab in 1921 of persons over 40 years *per mille* .. 220.
Average for the Punjab in 1911 of persons over 40 years *per mille* .. 220.

and well-to-do classes.

Section II.—Vital Statistics.

119. The numbers of births and deaths for males and females, the excess of births over deaths, and the ratio of female to male births and deaths, are given for each year since 1881 to 1920 inclusive, in Subsidiary Table XII to this Chapter. The question of the accuracy of the returns of births and deaths has been dealt with by Mr. Middleton in paragraph 25 of Chapter I, and by myself in paragraph 51 of Chapter II, and in Appendix I. My own belief is that there is a serious amount of omission in both birth and death returns, though in some districts, and, as it happens, in the whole of the Punjab taken together, the balance of reported births and deaths corresponds pretty closely with the change in population between the census of 1911 and that of 1921, after allowance for emigration and immigration. The reported figures of the vital statistics of the decade are

Births and Deaths.

Vital Statistics for the Punjab.

	Males.	Females.	Total.
<i>Births.</i>			
1911—15	2,269,989	2,070,721	4,340,710
1916—20	2,175,653	1,950,743	4,132,396
Total decade	4,445,642	4,027,464	8,473,106
<i>Deaths.</i>			
1911—15	1,586,399	1,462,307	3,048,703
1916—20	2,075,811	1,916,071	3,992,482
Total decade	3,662,207	3,393,078	7,051,185

given in the margin for the whole of the Punjab, which, of course, excludes the Delhi Province. The figures are quoted for the 2 quinquennia 1911—1915 and 1916—1920. From these figures, adopting as the approximate excess of immigrants over emigrants during the decade, 30,000 (15,000 males and 15,000 females), we make the following calculation of

the 1921 population from that of 1911 :—

	Males.	Females.	Total.
Population 1911	13,093,640	10,697,727	23,791,367
Add births 1911—1920	4,445,642	4,027,464	8,473,106
	17,539,282	14,725,191	32,264,473
Subtract deaths 1911—1920	3,662,207	3,398,978	7,061,185
	13,877,075	11,326,213	25,203,288
Add excess immigration over emigration	15,000	15,000	30,000
Calculated population 1921	13,892,075	11,341,213	25,233,288
Census population 1921	13,732,048	11,369,012	25,101,060
Difference, excess calculated over census population	+160,027	— 27,799	+132,228

The differences between the calculated populations male and female, and those given by the census figures, are indicative (so far as we accept the accuracy of the census figures, and of the calculation of emigration and immigration) that while male births are less frequently unreported than male deaths, for females the reverse is the case. The tendency to omit the births of females, is even greater than the tendency to omit reporting their deaths, though, as has been observed, there is reason to suppose that in both cases the number of omissions is considerable.

Ratio of female to male births.

120. The ratio of female to male births which, according to the figures, has risen from 0·87 in the decade 1881—1891 to round about 0·90 since 1891, has been given only to two places of decimals in Subsidiary Table XII to this Chapter, and even to that approximation the figures are probably not to be relied on. At any rate, those who wish to make the deduction that there has been a genuine increase in the ratio of female to male births since 1881, do so at their own risk. The apparent rise since 1891 may be explained by the slight increase in the efficiency of registration, which continued until the burden of the war on District Officers, and the turning of their attention to the more immediately pressing problems of recruitment and of anti-revolutionary measures, caused a slight relaxation in supervision of the chowkidar's (village watchman's) returns of births and deaths.*

The ratio of females to male deaths exhibits considerable irregularity, the highest reported ratio being 1·05 in 1904, and the lowest 0·85 in 1920. The comparatively high ratio of 0·97 in 1918, has been attributed to the effects of the influenza epidemic, to which a higher proportion of females than males succumbed. The other variations must be referred to their causes by medical experts.

Deaths in the Punjab 1867-1921.

121. According to the scheme elaborated with Colonel Forster, I. M. S., Director of Public Health, Punjab, the deaths from the following categories of diseases have been examined from 1867 onwards, for the elucidation of the seasonal variation. The categories were :—

- (1) deaths from all causes.
- (2) „ „ cholera.
- (3) „ „ small-pox.
- (4) „ „ bowel complaints.
- (5) „ „ plague.
- (6) „ „ fevers.
- (7) „ „ all causes not specified under groups (2)—(6) inclusive.

The 55 years have been separated into two periods, viz., from 1867—1896 (30 years) and from 1897—1921 (25 years), the latter period corresponding to the intensive colony-development policy of the Punjab Government, which has been the big factor in Punjab economic history in the past fifty years. A further advantage of this separation is that it will enable successive groups of 30 years' statistics to be compared, as the figures up to and including 1926, 1956, 1986 and so on, become available. The method adopted for preparing the statistics is known as Newsholme's. In this method the daily death-rate is determined by dividing the total number of deaths from the particular disease by the number of days in

*Up till quite recently the chowkidar's remuneration was round about Rs. 3—Rs. 4 a month, equivalent to about £3 a year. For this sum he had to have every birth and death in his village entered up by the circle patwari, and then tramp with his registers once a week to the nearest police station, it might be 10 or 15 miles away. No wonder he sometimes neglected his duties. In such cases a fine of 4 annas (four pence) would sometimes produce the utmost consternation.

the year, while the number of deaths in each month is divided by the number of days in the month. The ratio of the second quotient to the former, expressed as a percentage, gives a number indicative of the relative intensity of the disease in the month in question. By averaging these percentages for a good many years, we determine to what extent there is a seasonal recurrence of intensity.

By grouping the years according as the mortality from the disease considered was low, normal, or high, any differences in the seasonal recurrences for mild, moderate or severe epidemics can be isolated. All relevant data are collected in Appendix 4 to this volume. I leave to more competent persons the task of interpreting the results, in terms of fluctuations in the climate, food-supply, dates of fairs*, natural immunity, and medical treatment.

The reader is referred to Appendix 4 for further notes on the subject.

122. It has been observed, from time to time by, various writers on the subject that a fair comparison of the death-rate in jails, and in the free population, is possible only if allowance is made for the fact that persons undergoing imprisonment consist mainly of persons in the healthy middle ages of life, and of very few young children and aged persons.

Deaths in
Punjab Jails.

Thus, in Punjab jails the death-resistant group of males, aged 16-40, comprises no less than 80 per cent. of the jail population, whereas in the population at large this age group includes only about 40 per cent. of persons alive. In this way jails escape the major portion of the high infantile mortality and of the deaths among the aged. To institute a comparison of the healthiness of jails and of the free-living persons outside, it is necessary, therefore, to correct the crude jail death-rates for the effects of the differential size of the age-groups.

There are two standard ways of doing this, named respectively, the "direct" and "indirect" methods of correction. In the "direct" method the death-rates for each age-group in jails are applied to the numbers of persons in the corresponding age-groups of the free population, and a total death-rate calculated. In the "indirect" method the death-rates for each age-group in the free population are applied to the number of persons in the corresponding age-group of the jail population, and an "expected" total death-rate calculated; the ratio of the actual total death-rate in jails, to the "expected" death rate forms a factor, which multiplied by the actual jail death-rate, gives the "indirectly" corrected jail death-rate. Colonel Ward, I. M. S., Inspector-General of Prisons, having very kindly supplied me with the figures of—

(1) the ages of admission of convicts into Punjab jails,

(2) the mortality rates based on the average daily population,

for the eleven years 1911-1921 inclusive, the corrected jail death-rate has been found by the "indirect" method referred to above.†

The results for males only are given in the table below :

Mortality per mille in Punjab Jails.

Year.	"Expected" death-rate in jail if it were the same for each age-group as in the general population.	Actual death-rate in jails, as given in I. G. of Prisons Report.	Ratio of column 3 to column 2.	General death-rate per mille from Sanitary Report.	Corrected jail death-rate: column 4 into column 5.
1	2	3	4	5	6
1911	19.38	29.20	1.51	34.05	51.12
1912	11.44	20.06	1.75	26.63	46.60
1913	12.13	17.72	1.46	30.19	44.08
1914	12.94	26.99	2.09	31.96	66.80
1915	20.97	26.81	1.28	36.33	46.50
1916	12.42	21.71	1.75	30.70	53.73
1917	15.08	28.02	1.86	37.91	70.51
1918	61.53	58.51	0.91	80.20	73.67
1919	14.34	23.25	1.62	28.34	45.91
1920	14.64	16.05	1.11	28.55	32.56
1921	13.45	17.55	1.30	30.13	39.17

*Colonel Forster, I. M. S., to whose help, both mental and material, I am greatly indebted, points out that changes in the dates of fairs have marked effects in determining changes in the dates of onset of such a disease as cholera.

†Had time permitted I would have calculated the corrected jail death-rate by the "direct" method as well. For this purpose, however, the laborious abstraction of the deaths by age-groups is a necessary preliminary, and after looking at the original documents, which gave the mortalities for each Punjab jail separately, I concluded that the task, important though it is, could not be undertaken at present.

As it stands the table shows that, with the single exception of 1918, when the jails escaped much of the mortality from the severe influenza epidemic, the healthiness (as shown by the death returns) in Punjab jails from 1911 to 1921 was below that of the free population. Now, there are a great many points to be noticed before jumping to conclusions unfavourable to prison administration.

Firstly, the ages adopted in the calculation above are those of convicts

on admission. Actually we want the ages of convicts during the term of sentence. A calculation for 1914 given in the margin shows that we may adopt 1 year as an approximate figure for the duration of sentences in Punjab jails, and that therefore we should add, roughly, half a year to the ages of prisoners on admission to get the ages of those undergoing imprisonment. This will very slightly alter the corrected death-rates in favour of the jails.

• Average duration of sentence in Punjab Jails, 1914.

Period of sentence.	Adopted means in years.	Convicts in thousands.	Product.
1 month and under ..	0.06	31	1.86
6 months to over 1 month ..	0.30	68	20.4
1 year to over 6 months ..	0.80	46	36.8
5 years to over 1 year ..	2.0	37	74.0
10 years to over 5 years ..	7.0	5	35.0
Over 10 years ..	12.0	0.4	4.8
Transportation for life and term.	20.0	1.8	36.0
		189.2	208.86

Average duration, excluding transportation, 0.92 years.

Average duration, including transportation, 1.10 years.

Secondly, there is in jails a certain number of deaths of persons, who have been concerned in riots and affrays, and may have received such severe injuries, that they have died shortly after admission.

Thirdly, a large number of convicts are persons who earn a precarious livelihood outside prison, and belong to the relatively poorly-clad and ill-fed portion of the population. In other words the jail population is not a pure random sample from the general population.

Lastly, there is the psychological effect of captivity* which, even in the healthiest surroundings from the standpoint of sanitation and medical attention, has a depressing effect on the prisoner's physical "tone" and lessens his resistance to disease.

* This is the factor to which Col. Forster, I.M.S., Director of Public Health, attaches great weight.

I. Age distribution of 100,000 of each sex by annual periods. II. Based on Imperial Table VII. Age distribution of 10,000 of each sex in the Province and each Natural Division. III. Age distribution of 10,000 of each sex in each main religion. IV. Based on Imperial Table XIV. Age distribution of 1,000 of each sex in certain castes. V. Proportion of children under 10 and of persons over 60 to those aged 15—10 and also of married females aged 15—10 per 100 females. V-A. Proportion of children under 10 and of persons over 60 to those aged 15—10 in certain religions, and also of married females aged 15—10 per 100 females. VI. Variation in population at certain age-periods. VII. Reported birth-rate by sex and Natural Divisions (for British Territory only). VIII. Reported death-rate by sex and Natural Divisions (for British Territory only). IX. Reported death-rate by sex and age in decade and in selected years *per mille* living at same age according to the Census of 1911 (for Punjab and Delhi, British Territory only). X. Reported deaths from certain diseases *per mille* of each sex. XI. The ratio of the number of males, females and persons per 100,000 at the Census of 1911 to that of the Census of 1921 for each year of age, as recorded in the Census Schedules. XII. Statement showing the Births and Deaths since 1881, Punjab (British Territory) including Delhi.

SUBSIDIARY TABLE I.

Age distribution of 100,000 of each sex by annual periods.

Age.	MALES.				FEMALES.			
	Hindu.	Sikh.	Musalman.	Total.	Hindu.	Sikh.	Musalman.	Total.
1	2	3	4	5	6	7	8	9
TOTAL	100,000	100,000	100,000	300,000	100,000	100,000	100,000	300,000
Under 1	3,800	2,962	3,986	10,748	4,148	4,098	4,104	12,350
1 ..	1,448	2,005	1,538	5,011	1,626	1,759	1,906	5,291
2 ..	2,261	2,024	2,344	6,629	2,627	2,313	2,755	7,725
3 ..	2,551	2,197	2,803	7,551	3,030	2,620	2,995	8,645
4 ..	2,673	2,345	3,239	8,257	2,999	2,711	3,194	8,904
5 ..	3,269	3,190	3,221	9,680	3,297	3,307	3,449	10,053
6 ..	2,898	2,378	3,486	8,762	3,134	2,798	3,838	9,770
7 ..	2,735	2,935	2,804	8,474	2,937	2,831	3,117	8,885
8 ..	3,113	2,880	4,040	10,033	3,348	2,696	3,786	9,830
9 ..	2,293	2,411	2,223	6,927	2,337	2,421	2,191	6,949
10 ..	3,174	2,922	3,712	9,808	3,187	3,140	3,376	9,703
11 ..	1,664	2,417	1,541	5,622	1,635	1,857	1,447	4,939
12 ..	3,650	3,386	4,102	11,138	3,052	2,871	2,739	8,662
13 ..	1,641	2,047	1,355	5,043	1,469	1,695	1,332	4,496
14 ..	2,009	1,965	2,201	6,178	1,810	1,812	1,869	5,551
15 ..	2,241	2,604	2,018	6,863	1,891	2,114	1,950	5,958
16 ..	2,025	2,138	1,908	6,071	1,916	1,622	1,913	5,451
17 ..	1,013	1,311	1,010	3,334	892	919	779	2,620
18 ..	2,448	2,726	2,256	7,430	2,374	2,120	2,518	7,012
19 ..	791	996	875	2,665	613	721	728	2,062
20 ..	3,186	3,470	2,954	9,610	3,910	3,289	1,341	11,543
21 ..	595	744	508	1,847	392	683	413	1,488
22 ..	1,932	2,440	1,850	6,222	1,978	1,828	2,016	5,822
23 ..	684	912	633	2,229	526	531	451	1,511
24 ..	913	1,090	1,257	3,260	932	810	1,071	2,813
25 ..	4,260	3,974	3,919	12,153	4,590	3,719	4,812	13,121
26 ..	1,042	1,146	988	3,176	1,004	1,111	1,121	3,236
27 ..	731	906	778	2,415	600	761	522	1,886
28 ..	1,295	1,195	1,229	3,719	1,467	1,590	1,356	4,413
29 ..	333	363	505	1,201	338	316	351	1,005
30 ..	4,436	4,295	4,177	12,908	5,192	4,938	5,328	15,458
31 ..	212	190	314	716	143	158	225	526
32 ..	1,751	1,758	1,661	5,173	1,528	1,395	1,696	4,529
33 ..	349	426	377	1,152	280	356	177	813
34 ..	364	359	556	1,279	400	179	585	1,164
35 ..	3,894	3,990	3,481	11,365	3,696	3,973	3,780	11,449
36 ..	703	541	583	1,827	613	450	562	1,625
37 ..	231	245	227	703	184	202	195	581
38 ..	471	533	395	1,399	583	533	396	1,512
39 ..	227	190	640	1,057	189	231	154	574
40 ..	4,782	4,461	4,162	13,345	5,173	5,118	4,937	15,228
41 ..	132	114	161	407	118	110	124	352
42 ..	658	557	420	1,635	556	570	339	1,465
43 ..	172	149	80	401	84	154	55	293
44 ..	141	148	436	725	132	268	97	497
45 ..	3,088	2,983	2,588	8,659	2,954	3,350	2,693	8,997
46 ..	252	190	171	613	179	165	132	476
47 ..	164	194	137	495	162	148	51	361
48 ..	411	350	323	1,084	160	429	370	1,259
49 ..	185	135	502	822	161	164	91	416
50 ..	3,991	3,530	3,695	11,216	3,696	4,359	3,940	11,995
51 ..	123	95	123	341	82	99	89	270
52 ..	431	437	285	1,153	323	389	211	923
53 ..	83	145	68	296	43	81	34	168
54 ..	120	124	294	538	103	311	60	474
55 ..	1,742	1,486	1,785	5,013	1,398	1,636	1,333	4,367

SUBSIDIARY TABLE I—concluded.

Age distribution of 100,000 of each sex by annual periods.

Age.	MALES.				FEMALES.			
	Hindu.	Sikh.	Musalman.	Total.	Hind.	Sikh.	Musalman.	Total.
1	2	3	4	5	6	7	8	9
56	202	138	91	431	124	99	61	284
57	103	118	78	299	44	86	44	174
58	193	204	100	497	132	213	95	440
59	123	357	430	910	57	126	60	243
60	3,265	2,790	2,706	8,761	2,882	3,461	2,700	9,043
61	123	100	67	290	74	62	83	219
62	218	281	100	599	166	228	83	477
63	83	93	45	227	32	55	23	110
64	68	94	183	351	43	172	31	246
65	1,004	1,019	724	2,777	1,277	900	610	2,847
66	56	81	54	191	32	51	25	108
67	31	50	31	112	21	33	13	67
68	74	82	49	209	58	69	32	159
69	58	55	208	321	83	61	17	161
70	1,701	1,331	953	3,985	1,123	1,531	1,029	3,683
71	29	13	23	65	18	10	18	46
72	108	108	49	265	83	81	34	198
73	34	36	11	81	6	21	2	29
74	18	29	53	100	21	22	12	55
75	319	367	202	888	296	348	165	809
76	19	25	18	62	12	11	15	38
77	27	16	16	58	7	6	6	19
78	32	48	27	107	23	25	11	59
79	16	20	4	40	32	17	7	56
80	543	473	500	1,516	577	448	461	1,486
81	20	5	14	39	11	9	8	28
82	28	20	9	57	18	18	7	43
83	8	5	7	20	1	2	1	4
84	11	10	5	26	7	8	1	16
85	62	95	76	233	75	86	53	214
86	6	6	2	14	..	4	42	46
87	3	4	6	13	3	1	..	4
88	3	2	5	10	6	8	9	23
89	1	1	3	5	16	1	7	24
90	119	110	104	333	118	128	117	363
91	11	5	2	18	5	3	2	10
92	5	3	3	11	12	7	3	22
93	11	..	5	16	5	..	..	5
94	1	1	8	10	7	2	..	9
95	23	34	30	87	24	27	21	72
96	3	4	..	7	15	..	15	30
97	3	3	2	8	5	..	4	9
98	2	2	1	5	3	8	6	17
99	6	4	1	11	3	2	3	8
100	31	15	24	70	29	22	18	69
101	1	1	..	2	2	1	1	4
102 .. ..	..	1	2	3	1	1	..	2
103 .. ..	..	..	2	2	..	..	..	..
104 .. ..	..	..	..	..	1	..	..	1
105	2	..	1	3	3	..	1	4
106	3	..	..	3	..	..	..	..
110	2	..	5	7	2	1	1	4
112 .. ..	..	..	1	1	..	..	..	..
114 .. ..	..	..	..	..	..	..	1	1
115 .. ..	..	..	..	..	1	3	..	4
120 .. ..	..	..	3	3	..	..	1	1
121 .. ..	..	..	1	1	..	..	..	..
125 .. ..	..	..	1	1	..	..	..	..
135 .. ..	..	1	..	1	..	..	1	1

NOTE.—This Table was prepared by sorting actual samples, the numbers actually sorted were—

Males.—Hindu 51,403 from the Western and 66,008 from the Eastern Punjab.

Sikh 01,120 from the Central Punjab.

Musalman 54,303 from the Western and 60,566 from the Eastern Punjab.

Females.—Hindu 50,805 from the Western and 55,856 from the Eastern Punjab.

Sikh 101,554 from the Central Punjab.

Musalman 52,022 from the Western and 56,302 from the Eastern Punjab.

The figures have not been adjusted in any way beyond proportional reduction to a total of 100,000 of each sex.

SUBSIDIARY TABLE II.

BASED ON IMPERIAL TABLE VII.

Age distribution of 10,000 of each sex in the Province and each Natural Division.

Age	PUNJAB.		DELHI.		PUNJAB AND DELHI.									
	1921.		1921.		1921.		1911.		1901.		1891.		1881.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Under 1 ..	369	431	310	411	368	436	381	441	301	327	409	466	318	357
1-2 ..	112	167	113	167	142	167	140	172	160	177	288	313	179	201
2-3 ..	231	269	176	247	236	268	221	261	255	272	292	327	295	231
3-4 ..	258	306	225	317	257	307	238	302	256	284	291	309	247	280
4-5 ..	272	305	223	288	271	305	262	290	273	296	323	326	267	287
Total under 5 ..	1,272	1,478	1,047	1,429	1,268	1,477	1,277	1,472	1,215	1,350	1,603	1,741	1,216	1,356
5-9 (inclusive) ..	1,457	1,538	1,117	1,377	1,451	1,535	1,332	1,388	1,354	1,365	1,364	1,355	1,354	1,353
10-14 (inclusive) ..	1,217	1,104	1,013	956	1,213	1,102	1,181	1,029	1,231	1,087	1,054	916	1,216	1,060
15-19 (inclusive) ..	851	785	976	927	853	788	913	817	913	842	1,045	1,078	902	861
20-24 (inclusive) ..	770	796	1,130	1,080	777	801	854	889	794	852	927	948	856	916
25-29 (inclusive) ..	822	813	1,048	915	826	815	873	884	837	874	942	1,000	852	882
30-34 (inclusive) ..	753	774	938	837	756	775	796	828	820	861	648	662	833	859
35-39 (inclusive) ..	550	511	604	566	551	511	531	514	551	542	659	708	514	495
40-44 (inclusive) ..	566	598	678	612	568	598	601	652	612	673	356	326	648	693
45-49 (inclusive) ..	382	353	369	315	382	352	371	347	355	337	504	503	354	323
50-54 (inclusive) ..	461	456	481	465	465	456	477	460	468	462	201	163	496	473
55-59 (inclusive) ..	204	173	157	147	203	173	182	152	181	159	372	364	174	146
60-64 (inclusive) ..	340	311	258	262	338	310	230	297	606	596	325	296	585	576
65-69 (inclusive) ..	106	84	59	53	105	83	192	71	606	596	325	296	585	576
70 and over ..	246	226	122	128	241	224	170	260	606	596	325	296	585	576
MEAN AGE ..	25.4	24.5	25.8	24.1	25.4	24.5	25.2	24.7	25.0	24.9	23.0	22.6	25.0	24.7
INDO-GANGETIC PLAIN														
WEST.														
0-4 (inclusive) ..	1,272	1,511	1,047	1,429	1,262	1,508	1,243	1,451	1,185	1,271	1,591	1,720	1,160	1,281
5-9 (inclusive) ..	1,416	1,527	1,117	1,377	1,403	1,521	1,255	1,304	1,332	1,342	1,321	1,313	1,286	1,286
10-14 (inclusive) ..	1,215	1,120	1,013	956	1,207	1,114	1,199	1,028	1,216	1,117	1,086	949	1,236	1,092
15-19 (inclusive) ..	897	791	976	927	901	795	1,022	878	978	876	1,092	1,100	962	893
20-29 (inclusive) ..	2,912	2,857	3,720	3,339	2,975	2,876	3,107	3,150	3,005	3,123	3,204	3,302	3,111	3,207
40-59 (inclusive) ..	1,602	1,592	1,688	1,531	1,605	1,591	1,627	1,618	1,683	1,688	1,419	1,365	1,697	1,691
60 and over ..	656	602	439	441	647	596	517	541	571	580	290	261	548	550
HIMALAYAN.														
0-4 (inclusive) ..	1,056	1,209	..	..	1,056	1,209	1,089	1,225	1,054	1,193	1,375	1,589	1,553	1,209
5-9 (inclusive) ..	1,266	1,345	..	..	1,266	1,345	1,191	1,288	1,177	1,233	1,239	1,282	1,266	1,343
10-14 (inclusive) ..	1,122	1,024	..	..	1,122	1,024	1,098	1,002	1,212	1,089	1,070	927	1,188	1,022
15-19 (inclusive) ..	866	911	..	..	866	911	904	927	914	912	1,013	1,113	910	928
20-29 (inclusive) ..	3,041	3,137	..	..	3,041	3,137	3,170	3,216	3,186	3,258	3,388	3,406	3,223	3,304
40-59 (inclusive) ..	1,846	1,663	..	..	1,846	1,663	1,843	1,659	1,805	1,613	1,532	1,338	1,707	1,568
60 and over ..	803	711	..	..	803	711	705	653	652	640	383	345	613	626
SUB-HIMALAYAN.														
0-4 (inclusive) ..	1,261	1,426	..	..	1,261	1,426	1,274	1,460	1,286	1,353	1,562	1,666	1,217	1,350
5-9 (inclusive) ..	1,455	1,502	..	..	1,455	1,502	1,352	1,393	1,348	1,318	1,416	1,395	1,406	1,396
10-14 (inclusive) ..	1,226	1,103	..	..	1,226	1,103	1,208	1,049	1,234	1,054	1,057	917	1,263	1,110
15-19 (inclusive) ..	812	770	..	..	812	770	844	763	881	818	1,026	1,065	887	865
20-29 (inclusive) ..	2,794	2,856	..	..	2,794	2,856	2,979	3,078	2,955	3,138	3,155	3,247	3,622	3,195
40-59 (inclusive) ..	1,662	1,648	..	..	1,662	1,648	1,661	1,645	1,635	1,670	1,427	1,377	1,613	1,597
60 and over ..	790	695	..	..	790	695	682	621	661	619	357	333	590	577
NORTH-WEST DRY AREA.														
0-4 (inclusive) ..	1,343	1,549	..	..	1,343	1,549	1,403	1,604	1,408	1,589	1,812	2,017	1,482	1,690
5-9 (inclusive) ..	1,591	1,651	..	..	1,591	1,651	1,509	1,576	1,477	1,509	1,467	1,454	1,623	1,497
10-14 (inclusive) ..	1,238	1,098	..	..	1,238	1,098	1,175	1,029	1,194	1,056	969	834	1,070	934
15-19 (inclusive) ..	795	753	..	..	795	753	779	722	793	764	914	1,015	725	715
20-29 (inclusive) ..	2,857	2,928	..	..	2,857	2,928	2,975	3,044	2,989	3,081	3,023	3,070	2,844	2,975
40-59 (inclusive) ..	1,538	1,466	..	..	1,538	1,466	1,563	1,487	1,531	1,450	1,443	1,293	1,600	1,562
60 and over ..	638	554	..	..	638	554	596	538	608	551	352	315	666	625

NOTES. 1. Figures for 1921 are based on the Census of India, 1921. Figures for 1911 are based on the Census of India, 1911. Figures for 1901 and 1881 are based on the Census of India, 1901 and 1881 respectively. Figures for 1921 and 1911 are available for the whole of the Province and for each of the four Natural Divisions. Figures for 1901 and 1881 are available for the whole of the Province and for each of the four Natural Divisions. Figures for 1921 and 1911 are available for the whole of the Province and for each of the four Natural Divisions. Figures for 1901 and 1881 are available for the whole of the Province and for each of the four Natural Divisions.

2. Figures of 1901 do not include the population of Biloch Trans-Frontier.

SUBSIDIARY TABLE III.

Age distribution of 10,000 of each sex in each main Religion.

Age.	PUNJAB.		DELHI.		PUNJAB AND DELHI.									
	1921.		1921.		1921.		1911.		1901.		1891.		1881.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ALL RELIGIONS														
0—4 (inclusive)	1,272	1,478	1,047	1,420	1,268	1,477	1,277	1,472	1,245	1,350	1,003	1,740	1,216	1,356
5—9 (inclusive)	1,457	1,538	1,117	1,377	1,451	1,535	1,333	1,388	1,355	1,365	1,364	1,355	1,354	1,353
10—14 (inclusive)	1,217	1,104	1,013	956	1,213	1,102	1,189	1,029	1,231	1,087	1,054	916	1,216	1,069
15—19 (inclusive)	851	785	976	927	853	788	915	817	913	842	1,045	1,078	902	861
20—39 (inclusive)	2,895	2,894	3,720	3,338	2,916	2,902	3,050	3,115	3,001	3,128	3,176	3,255	3,055	3,161
40—59 (inclusive)	1,616	1,586	1,688	1,539	1,618	1,579	1,635	1,611	1,649	1,632	1,433	1,356	1,673	1,635
60 and over	692	621	439	443	687	617	601	568	606	596	325	294	584	575
MEAN AGE	25.4	24.5	25.8	24.1	25.4	24.5	25.2	24.7	25.0	24.9	23.0	22.6	25.4	24.7
HINDU														
0—4 (inclusive)	1,211	1,436	1,053	1,109	1,205	1,435	1,189	1,386	1,156	1,267	1,546	1,706	1,122	1,200
5—9 (inclusive)	1,384	1,489	1,112	1,316	1,374	1,485	1,235	1,302	1,304	1,349	1,294	1,305	1,291	1,312
10—14 (inclusive)	1,187	1,096	1,015	936	1,180	1,090	1,166	1,028	1,234	1,102	1,082	937	1,217	1,064
15—19 (inclusive)	886	817	998	960	834	822	999	880	948	862	1,076	1,092	947	887
20—39 (inclusive)	3,005	2,952	3,724	3,356	3,032	2,965	3,158	3,189	3,079	3,158	3,274	3,327	3,191	3,247
40—59 (inclusive)	1,675	1,606	1,667	1,541	1,675	1,603	1,695	1,655	1,717	1,681	1,435	1,365	1,697	1,667
60 and over	652	606	431	452	644	600	558	554	562	581	293	272	535	563
MEAN AGE	25.7	24.7	25.7	24.2	25.6	24.6	25.5	25.0	25.3	25.1	23.1	22.7	25.2	25.0
MUSALMAN—														
0—4 (inclusive)	1,328	1,518	1,054	1,453	1,324	1,517	1,347	1,541	1,342	1,451	1,073	1,806	1,313	1,453
5—9 (inclusive)	1,533	1,586	1,164	1,454	1,525	1,585	1,422	1,467	1,421	1,407	1,443	1,418	1,440	1,417
10—14 (inclusive)	1,237	1,106	1,041	1,013	1,235	1,105	1,209	1,040	1,233	1,083	1,026	894	1,229	1,080
15—19 (inclusive)	816	769	943	841	817	770	842	776	869	821	1,024	1,075	854	840
20—39 (inclusive)	2,823	2,878	3,542	3,247	2,832	2,882	2,970	3,059	2,910	3,093	3,093	3,178	2,918	3,051
40—59 (inclusive)	1,503	1,535	1,774	1,556	1,566	1,536	1,588	1,553	1,572	1,553	1,397	1,321	1,627	1,582
60 and over	700	608	479	436	698	605	622	564	623	592	344	308	619	577
MEAN AGE	25.0	24.1	26.0	23.9	25.0	24.2	24.9	24.2	24.6	24.4	22.7	22.2	24.7	24.3
CHRISTIAN—														
0—4 (inclusive)	1,394	1,691	937	1,353	1,375	1,679	1,348	1,777	919	1,557	891	1,788	678	1,670
5—9 (inclusive)	1,520	1,671	894	1,357	1,495	1,660	1,293	1,572	956	1,472	786	1,506	559	1,477
10—14 (inclusive)	1,230	1,160	720	935	1,208	1,152	1,001	1,061	810	1,110	530	977	414	1,120
15—19 (inclusive)	883	811	851	1,027	882	818	744	792	608	879	775	1,052	398	956
20—39 (inclusive)	3,015	2,783	5,095	3,728	3,100	2,817	3,955	3,045	5,379	3,367	6,137	3,503	7,005	3,671
40—59 (inclusive)	1,348	1,369	1,252	1,313	1,345	1,367	1,225	1,332	1,011	1,238	767	984	771	908
60 and over	610	515	251	287	595	507	434	421	287	377	114	190	85	180
MEAN AGE	23.8	22.7	24.9	23.2	23.9	22.7	23.7	22.9	24.4	22.5	23.3	20.7	25.4	20.6
SIKH—														
0—4 (inclusive)	1,209	1,412	631	1,517	1,209	1,412	1,247	1,417	1,157	1,151	1,545	1,542	1,184	1,291
5—9 (inclusive)	1,358	1,458	651	1,354	1,358	1,458	1,261	1,300	1,249	1,190	1,317	1,261	1,225	1,197
10—14 (inclusive)	1,219	1,115	672	877	1,218	1,115	1,189	977	1,219	1,040	1,082	942	1,163	1,027
15—19 (inclusive)	891	760	946	990	891	760	977	781	998	864	1,006	1,017	939	847
20—39 (inclusive)	2,850	2,806	5,039	3,922	2,853	2,806	2,992	3,136	2,879	3,189	3,021	3,360	3,016	3,223
40—59 (inclusive)	1,691	1,718	1,317	1,078	1,690	1,718	1,679	1,746	1,767	1,863	1,633	1,520	1,809	1,788
60 and over	782	731	244	263	781	731	655	645	731	703	396	349	664	627
MEAN AGE	26.2	25.6	26.6	22.0	26.2	25.6	25.7	25.7	26.1	26.7	23.9	23.6	26.0	25.8

SUBSIDIARY TABLE IV. BASED ON IMPERIAL TABLE XIV. Age distribution of 1,000 of each sex in certain castes. PUNJAB.											SUBSIDIARY TABLE IV-A. Proportion of children under 12 and of persons over 40 to those aged 15-40 in certain castes, also of married females aged 15-40 per 100 females.				
CASTE.	MALES.—NUMBER per mille AGED.					FEMALES.—NUMBER per mille AGED.					PROPORTION OF CHILDREN BOTH SEXES PER 100.		PROPORTION OF PERSONS OVER 40 PER 100.		Number of married females aged 15-40 per 100 females of all ages.
	0-4 (inclusive).	5-11 (inclusive).	12-14 (inclusive).	15-39 (inclusive).	40 and over.	0-4 (inclusive).	5-11 (inclusive).	12-14 (inclusive).	15-39 (inclusive).	40 and over.	Persons aged 15-40.	Married females aged 15-40.	Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Aggarwal (Hindu) ..	122	181	72	407	218	139	194	65	384	218	80	228	54	57	31
2. Ahir (Hindu) ..	125	187	75	381	229	156	198	59	364	223	88	228	60	61	33
3. Arain (Musalman) ..	137	195	75	367	226	156	202	74	360	208	95	242	62	58	31
4. Arora (Hindu) ..	119	187	78	395	221	139	194	66	385	216	82	218	56	56	32
5. " (Sikh) ..	140	202	80	351	227	150	200	69	369	212	96	242	65	58	31
6. Awan (Musalman) ..	133	197	92	349	229	141	188	69	371	231	92	223	66	62	31
7. Barwala (Musalman) ..	138	206	73	364	219	168	208	71	347	206	101	255	60	59	31
8. Bawaria (Hindu) ..	163	230	68	323	216	180	228	54	352	186	119	270	66	53	32
9. Bhurui (Musalman) ..	134	198	75	356	237	146	209	62	356	227	96	241	67	64	31
10. Biloch (Musalman) ..	136	211	74	349	230	152	203	62	364	219	98	241	66	60	32
11. Brahman (Hindu) ..	107	166	71	401	255	128	183	61	380	248	74	212	64	65	30
12. Chamar (Hindu) ..	136	201	78	378	207	157	209	66	367	201	94	228	55	55	34
13. " (Sikh) ..	134	200	73	362	231	152	216	62	355	215	97	235	64	60	33
14. Chhimba (Hindu) ..	120	174	72	362	272	140	198	66	367	229	86	219	75	62	33
15. " (Sikh) ..	122	185	72	354	267	146	199	67	345	243	92	232	75	70	31
16. " (Musalman) ..	142	205	72	361	220	165	210	63	353	209	101	251	61	59	31
17. Churah (Hindu) ..	143	205	84	365	203	168	214	70	362	186	100	246	56	51	32
18. " (Sikh) ..	139	213	73	379	196	164	226	70	362	178	99	255	52	49	32
19. Dagi or Koli (Hindu) ..	106	168	70	431	225	116	165	63	412	214	66	157	52	50	36
20. Dhanak (Hindu) ..	150	220	73	360	197	170	219	71	371	169	104	234	55	46	34
21. Dhobi (Musalman) ..	142	184	75	361	238	151	189	74	366	220	92	228	66	60	31
22. Dogar (Musalman) ..	128	193	84	378	217	155	204	76	355	210	92	256	57	59	29
23. Faqir (Musalman) ..	127	198	75	360	240	159	209	65	352	215	97	246	66	61	31
24. Ghirth (Hindu) ..	129	192	75	361	243	155	181	67	395	202	87	200	67	51	34
25. Gujjar (Hindu) ..	110	186	71	391	236	135	179	61	383	239	79	207	61	62	34
26. " (Musalman) ..	126	186	81	366	241	141	197	72	366	224	89	221	66	61	32
27. Harni (Musalman) ..	139	227	66	314	254	196	213	57	318	216	122	313	81	68	29
28. Jat (Hindu) ..	128	188	76	379	229	150	197	69	363	221	89	226	61	61	33
29. " (Sikh) ..	114	176	74	382	254	135	184	66	356	259	81	228	66	73	32
30. " (Musalman) ..	134	197	82	360	227	153	195	72	367	213	93	245	63	58	31
31. Jhiwar (Hindu) ..	129	180	71	381	233	149	203	65	365	218	89	230	61	60	32
32. " (Sikh) ..	134	196	71	370	229	153	209	57	357	224	95	232	62	63	32
33. " (Musalman) ..	143	195	79	363	226	161	208	66	359	206	98	241	61	57	32
34. Julaha (Hindu) ..	113	163	64	411	249	133	189	64	402	212	73	181	61	53	36
35. " (Musalman) ..	135	196	73	365	231	154	204	67	365	210	94	241	62	58	31
36. Kamboh (Sikh) ..	145	177	73	381	224	159	209	73	354	205	93	241	59	58	31
37. " (Musalman) ..	151	200	75	346	228	164	203	80	369	184	101	234	66	50	33
38. Kanet (Hindu) ..	95	162	73	404	266	105	165	62	414	254	64	152	66	61	36
39. Kashmiri (Musalman) ..	128	194	77	366	235	138	193	68	358	243	90	234	64	68	30
40. Khatiri (Hindu) ..	112	161	76	416	235	144	173	69	370	244	74	217	56	66	30
41. " (Sikh) ..	134	184	80	341	261	141	184	72	357	246	92	224	77	69	30
42. Khoja (Musalman) ..	147	207	74	353	219	161	212	69	365	193	101	238	63	53	31
43. Khokhar (Musalman) ..	132	199	83	354	232	159	198	65	366	212	95	254	66	58	30
44. Kumhar (Hindu) ..	129	188	72	384	227	154	205	65	366	210	90	222	59	58	33
45. " (Musalman) ..	147	194	81	355	223	158	208	65	353	216	100	253	63	61	30
46. Lohar (Hindu) ..	118	177	72	384	219	140	187	62	385	226	81	202	65	59	34
47. " (Musalman) ..	138	207	77	360	218	154	202	70	365	209	97	239	61	57	32
48. Machhi (Musalman) ..	144	196	81	355	224	162	209	67	353	209	100	253	63	59	30
49. Mahtam (Sikh) ..	177	221	76	321	206	201	229	70	329	171	127	320	64	62	27
50. Mali (Hindu) ..	125	191	72	391	221	156	202	68	376	198	87	223	58	53	34

SUBSIDIARY TABLE IV. BASED ON IMPERIAL TABLE XIV. Age distribution of 1,000 of each sex in certain castes.—continued.											SUBSIDIARY TABLE IV-A. Proportion of children under 12 and of persons over 40 to those aged 15—40 in certain castes, also of married females aged 15—40 per 100 females.—continued				
CASTE.	MALES.—NUMBER per mille AGED					FEMALES.—NUMBER per mille AGED					PROPORTION OF CHILDREN BOTH SEXES PER 100.		PROPORTION OF PERSONS OVER 40 PER 100 AGED 15—40.		Number of married females aged 15—40 per 100 females of all ages.
	0—4 (inclusive).	5—11 (inclusive).	12—14 (inclusive).	15—39 (inclusive).	40 and over.	0—4 (inclusive).	5—11 (inclusive).	12—14 (inclusive).	15—39 (inclusive).	40 and over.	Persons aged 15—40.	Married females aged 15—40.	Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
51. Maliar (Musalman) ..	143	203	91	332	231	135	193	73	370	229	97	219	70	62	32
52. Mallah (Musalman)	151	206	76	348	219	152	214	68	375	191	100	253	63	51	31
53. Meo (Musalman) ..	133	197	80	414	176	141	198	71	408	182	81	202	42	45	36
54. Mirasi (Musalman)	135	191	77	362	232	148	196	66	362	228	93	240	64	63	30
55. Mochi (Musalman)	137	184	84	365	230	160	202	66	355	217	94	241	63	61	31
56. Mughal (Musalman)	134	185	74	367	240	136	181	69	383	231	85	214	65	60	32
57. Mussali (Musalman).	148	213	78	346	215	169	221	73	351	186	107	276	62	53	29
58. Nai (Hindu) ..	123	180	73	385	234	140	194	63	371	232	84	219	62	62	33
59. „ (Sikh) ..	119	179	74	384	244	140	196	69	349	246	85	241	64	71	30
60. „ (Musalman) ..	133	199	76	357	235	159	199	68	353	221	97	249	66	63	30
61. Pakhiwara (Musalman).	135	224	72	332	237	186	217	46	343	208	113	276	72	61	30
62. Pathan (Musalman)	122	179	71	395	233	141	194	66	374	225	82	225	59	60	31
63. Qassab (Musalman)	132	197	84	376	211	152	189	85	374	200	89	222	56	54	32
64. Qureshi (Musalman)	129	190	78	365	238	136	182	70	382	230	85	224	65	60	30
65. Rajput (Hindu) ..	99	162	73	413	253	117	170	66	358	249	67	190	61	62	32
66. „ (Musalman)	134	192	78	373	223	149	198	71	368	214	91	243	56	59	30
67. Saini (Hindu) ..	103	176	78	367	276	134	189	64	345	268	84	211	75	78	31
68. „ (Sikh) ..	127	188	81	389	215	143	188	61	364	244	85	216	55	67	33
69. Sansi (Hindu) ..	138	195	81	353	233	158	201	77	356	208	97	278	66	58	30
70. Sayad (Musalman)	125	189	77	365	244	138	191	67	370	234	87	233	67	63	29
71. Sheikh (Musalman).	114	161	75	411	239	146	191	66	382	215	76	210	58	56	33
72. Sunar (Hindu) ..	132	165	79	388	236	155	165	71	381	228	80	212	61	60	32
73. „ (Musalman) ..	181	97	87	397	235	152	200	68	377	203	81	217	59	54	31
74. Tarkhan (Hindu) ..	122	188	70	381	235	147	200	65	366	222	87	221	63	61	33
75. „ (Sikh) ..	128	167	78	375	252	145	175	71	372	237	82	210	67	64	33
76. „ (Musalman)	143	193	79	357	228	161	192	66	367	214	95	239	64	58	32
77. Teli (Musalman) ..	142	203	79	365	211	161	206	67	357	209	98	247	58	59	31

SUBSIDIARY TABLE IV. BASED ON IMPERIAL TABLE XIV. Age distribution of 1,000 of each sex in certain castes. DELHI.											SUBSIDIARY TABLE IVA. Proportion of children under 12 and of persons over 40 to those aged 15-40 in certain castes, also of married females aged 15-40 per 100 females.				
CASTES.	MALES.—NUMBER per mille AGED					FEMALES.—NUMBER per mille AGED					PROPORTION OF CHILDREN BOTH SEXES PER 100.		PROPORTION OF PERSONS OVER 40 PER 100 AGED 15-40.		Number of married females aged 15-40 per 100 females of all ages.
	0-4 (inclusive).	5-11 (inclusive).	12-14 (inclusive).	15-39 (inclusive).	40 and over.	0-4 (inclusive).	5-11 (inclusive).	12-14 (inclusive).	15-39 (inclusive).	40 and over.	Persons aged 15-40.	Married females aged 15-40.	Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Aggarwal (Hindu) ..	102	134	60	450	234	122	150	47	437	244	56	157	56	56	38
2. " (Jain) ..	108	119	93	429	251	134	152	45	446	223	58	158	59	50	37
3. Ahir (Hindu) ..	155	114	65	447	219	145	172	69	397	226	68	192	49	57	36
4. Arain (Musalman) ..	130	183	65	446	176	177	161	62	389	211	77	197	39	54	36
5. Brahman (Hindu) ..	91	123	63	512	211	127	160	49	420	214	51	173	41	58	35
6. Chamar (Hindu) ..	109	149	68	468	206	146	180	58	453	163	62	160	41	36	42
7. Churah (Hindu) ..	118	184	88	427	183	164	193	59	423	161	77	192	43	38	39
8. Dhanak (Hindu) ..	110	129	86	490	185	148	175	55	443	179	57	182	38	49	41
9. Dhobi (Hindu) ..	113	173	51	490	173	143	181	41	442	193	61	173	35	44	40
10. " (Musalman) ..	138	161	73	419	209	176	202	53	425	144	79	223	50	34	33
11. Dagi or Koli (Hindu) ..	83	108	64	571	174	129	177	50	489	155	44	134	31	32	45
12. Faqir (Musalman) ..	141	190	80	415	174	179	200	66	379	176	89	212	42	46	35
13. Gujjar (Hindu) ..	114	182	70	415	219	149	117	106	417	211	68	181	53	50	37
14. Jat (Hindu) ..	114	169	70	448	199	159	175	59	391	213	72	185	44	54	37
15. Jhiwar (Hindu) ..	88	176	51	558	127	135	172	40	447	266	51	181	23	46	41
16. Julaha (Hindu) ..	102	147	53	482	216	133	162	76	418	181	58	147	45	40	42
17. Khatri (Hindu) ..	74	120	61	529	216	124	171	48	418	209	48	139	41	47	40
18. Kumhar (Hindu) ..	108	152	59	512	169	150	201	59	429	170	63	174	33	40	39
19. Lohar (Hindu) ..	117	151	72	469	188	146	202	50	390	212	69	205	40	54	36
20. Machhi (Musalman) ..	83	96	204	431	186	118	191	32	503	152	49	155	43	30	45
21. Mali (Hindu) ..	101	125	57	468	249	125	154	54	419	218	51	144	53	48	40
22. Meo (Musalman) ..	136	157	72	431	204	162	174	55	424	185	73	183	47	44	39
23. Mughal (Musalman) ..	115	157	70	409	249	195	159	71	310	265	84	273	61	86	26
24. Nai (Hindu) ..	118	171	60	453	198	131	186	48	426	209	68	173	44	49	38
25. Pathan (Musalman) ..	88	127	72	451	262	119	140	57	469	215	51	138	58	46	43
26. Qureshi (Musalman) ..	122	133	74	450	221	127	219	90	388	176	70	227	49	45	29
27. Rajput (Hindu) ..	79	135	62	505	219	133	168	54	453	192	51	167	43	42	40
28. " (Musalman) ..	80	132	67	467	254	157	182	39	428	190	57	176	54	45	39
29. Saini (Hindu) ..	128	198	72	385	217	171	207	56	374	192	93	218	57	51	34
30. Sansi (Hindu) ..	117	143	19	468	253	73	173	100	482	172	54	156	51	36	39
31. Sayad (Musalman) ..	113	159	66	436	226	129	194	64	367	246	72	261	52	67	27
32. Sheikh (Musalman) ..	102	127	95	454	222	137	177	87	410	189	61	163	49	46	38
33. Sunar (Hindu) ..	84	142	54	460	260	120	153	53	423	242	56	156	57	57	36
34. Tarkhan (Hindu) ..	73	119	84	526	198	142	155	44	460	199	46	148	39	43	42
35. Teli (Musalman) ..	119	167	73	425	216	178	207	85	364	166	84	215	51	46	34

SUBSIDIARY TABLE V.

Population of children under 10 and of persons over 60 to those aged 15—40 and also of married females aged 15—40 per 100 females.

DISTRICT OR STATE AND NATURAL DIVISION.	PROPORTION OF CHILDREN BOTH SEXES PER 100.								PROPORTION OF PERSONS AGED 60 AND OVER PER 100, AGED 15—40.								NUMBER OF MARRIED FEMALES AGED 15—40 PER 100 FEMALES OF ALL AGES.			
	Persons aged 15—40.				Married female, aged 15—40.				1921.		1911.		1901.		1891.					
	1921.	1911.	1901.	1891.	1921.	1911.	1901.	1891.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	1921.	1911.	1901.	1891.
PUNJAB AND DELHI	76	69	67	71	198	179	168	176	18	17	12	13	14	15	16	17	18	19	20	21
PUNJAB ..	77	..	..	..	199	..	..	..	18	17	..	..	..	..	..	..	32	..	..	..
INDO-GANGETIC PLAIN	75	64	64	68	198	170	159	169	17	16	13	13	14	14	7	6	32	35	35	38
WEST (TOTAL).	76	..	..	..	200	..	..	..	17	16	..	..	..	..	..	..	32	..	..	..
INDO-GANGETIC PLAIN (PUNJAB).	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1. Hissar ..	87	64	58	77	214	166	150	191	16	15	11	12	12	14	7	6	31	36	34	36
2. Loharu State ..	104	75	55	80	242	176	139	200	24	15	16	18	13	17	7	6	30	35	34	35
3. Rohtak ..	77	62	67	67	186	153	154	160	14	13	12	13	13	14	6	5	34	36	36	30
4. Dujana State ..	87	74	66	76	195	169	150	175	25	19	19	17	17	17	8	6	32	35	34	37
5. Gurgaon ..	72	61	71	61	178	150	166	149	13	13	12	12	12	13	4	4	34	35	35	40
6. Patwadi State ..	75	63	69	60	185	147	151	150	19	16	16	16	15	16	5	4	32	35	36	39
7. Karnal ..	72	57	59	60	187	148	150	156	13	11	10	9	10	10	5	4	34	37	36	39
8. Jullundur ..	75	68	67	70	192	174	157	168	25	22	19	18	19	19	8	8	31	34	35	39
9. Kapurthala State ..	76	70	70	72	197	185	166	180	22	20	17	16	18	17	8	7	32	33	35	37
10. Ludhiana ..	74	63	64	66	197	171	154	160	20	19	16	14	18	18	8	6	31	34	35	39
11. Malerkotla State ..	64	56	65	70	188	154	153	167	19	21	15	14	20	18	7	6	32	35	35	38
12. Perwazpore ..	81	67	65	76	217	187	172	191	17	17	12	13	13	13	7	6	31	34	33	37
13. Faridkot State ..	78	68	66	82	211	185	180	208	15	17	12	13	13	13	7	6	31	34	33	37
14. Patiala State ..	75	61	57	64	198	165	147	163	17	16	13	13	14	15	6	5	32	35	35	38
15. Jind State ..	81	61	59	67	207	156	148	171	16	15	12	13	13	14	6	5	32	37	35	38
16. Nabha State ..	74	63	61	67	198	168	157	169	19	18	15	15	15	16	6	5	31	35	35	38
17. Lahore ..	71	63	66	73	210	184	171	184	15	19	12	15	14	14	7	6	31	34	35	38
18. Amritsar ..	74	67	70	75	197	180	167	178	20	20	16	16	18	16	8	7	32	34	35	39
19. Gujranwala ..	72	78	72	70	201	208	179	173	18	17	16	15	18	15	8	7	30	32	34	33
20. Sheikhupura ..	82	*	*	*	224	*	*	*	18	17	*	*	*	*	*	*	31	*	*	*
HIMALAYAN	61	58	57	61	148	141	139	154	21	18	17	16	16	15	9	8	35	36	36	38
21. Nahan State ..	50	57	57	59	133	137	135	150	17	15	15	14	14	13	6	5	39	39	39	42
22. Simla ..	27	32	30	35	120	121	117	129	7	12	8	11	7	11	3	5	38	37	38	40
23. Simla Hill States ..	53	53	52	57	131	129	126	139	18	16	16	16	15	15	9	8	35	36	37	39
24. Bilaspur State ..	58	67	65	67	141	141	141	141	24	20	16	16	15	15	9	8	35	36	37	40
25. Kangra ..	68	63	61	65	160	150	149	163	23	18	18	16	16	15	9	7	34	35	35	36
26. Mandi State ..	67	61	58	67	158	144	139	158	21	18	19	16	16	15	11	10	34	36	36	37
27. Suket State ..	51	47	48	60	128	119	119	152	16	14	14	12	16	15	7	6	37	38	38	37
28. Chamba State ..	61	59	59	63	147	138	138	148	26	21	24	19	24	20	13	10	34	36	35	38
SUB-HIMALAYAN	78	71	68	71	196	182	166	176	22	19	18	16	17	16	9	8	31	33	34	37
29. Ambala ..	66	53	54	58	179	151	141	154	16	15	12	12	12	14	6	6	33	35	36	39
30. Kalsia State ..	67	57	60	65	184	158	155	167	17	15	13	12	13	14	6	5	33	35	35	38
31. Hoshiarpur ..	75	68	66	71	180	168	154	167	26	22	21	19	19	19	9	9	32	34	35	38
32. Gurdaspur ..	82	75	71	74	214	199	173	193	20	18	16	15	16	15	7	6	31	33	35	36
33. Sialkot ..	84	82	75	73	214	209	176	170	24	21	20	18	19	18	9	8	30	32	34	39
34. Gujrat ..	84	79	72	78	207	193	176	186	24	20	20	17	18	17	10	8	30	32	32	36
35. Jhelum ..	81	69	72	78	186	170	172	191	28	21	21	17	21	17	12	11	31	33	32	34
36. Rawalpindi ..	68	65	68	72	177	166	173	187	19	17	17	15	16	14	9	8	34	34	34	36
37. Attock ..	86	80	*	*	203	191	*	*	21	18	17	15	*	*	*	*	31	32	*	*
NORTH-WEST DRY AREA.	83	81	78	84	219	209	202	212	17	15	16	14	16	14	9	8	31	32	32	35
38. Montgomery ..	86	84	79	91	237	227	214	233	19	15	17	15	17	14	11	9	29	30	30	33
39. Shahpur ..	83	76	78	76	221	204	206	213	19	17	16	14	21	17	12	10	30	31	29	33
40. Mianwali ..	85	90	82	*	214	222	198	*	17	16	17	15	16	14	*	*	31	30	33	*
41. Lyallpur ..	94	86	72	*	248	229	195	*	18	17	16	15	15	12	*	*	30	32	34	*
42. Jhang ..	90	83	81	91	239	220	210	226	22	18	19	16	21	16	13	10	28	30	30	32
43. Multan ..	79	79	77	78	218	206	201	205	16	14	15	14	14	13	7	7	30	32	33	35
44. Bahawalpur State ..	76	74	77	80	195	189	200	204	16	13	15	13	15	15	6	6	34	34	33	37
45. Muzaffargarh ..	77	78	78	80	192	190	193	187	16	13	15	13	14	13	7	6	33	34	34	37
46. Dera Ghazi Khan ..	80	84	86	85	198	202	209	209	16	14	17	15	16	15	8	7	34	34	34	36
DELHI ..	54	..	..	..	150	..	..	..	9	10	..	..	..	..	..	..	38	..	..	..
INDO-GANGETIC PLAIN	54	..	..	..	150	..	..	..	9	10	..	..	..	..	..	..	38	..	..	..
WEST.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1. Delhi ..	54	..	..	..	150	..	..	..	9	10	..	..	..	..	..	..	38	..	..	..

SUBSIDIARY TABLE V-A.

Proportion of children under 10 and of persons over 60 to those aged 15-40 in certain religions, and also of married females aged 15-40 per 100 females.

NATURAL DIVISION AND RELIGION.	PROPORTION OF CHILDREN BOTH SEXES PER 100.				PROPORTION OF PERSONS AGED 60 AND OVER PER 100 AGED 15-40.				PROPORTION OF MARRIED FEMALES AGED 15-40 PER 100 FEMALES OF ALL AGES.	
	Persons aged 15-40.		Married females aged 15-40.		1921.		1911.		1921.	1911.
	1921.	1911.	1921.	1911.	Males.	Females.	Males.	Females.		
1	2	3	4	5	6	7	8	9	10	11
PUNJAB AND DELHI	76	69	198	179	18	17	15	14	32	34
PUNJAB	77	..	199	..	18	17	..	..	32	..
INDO-GANGETIC PLAIN WEST (TOTAL).	75	64	198	170	17	16	13	13	32	35
Hindu	73	61	193	162	15	15	12	12	33	30
Musalman	78	68	204	179	17	16	14	14	32	34
Christian	77	60	215	197	14	13	8	10	32	33
Jain	66	56	181	158	12	12	10	12	32	33
Sikh	72	64	195	174	21	21	16	16	32	35
INDO-GANGETIC PLAIN WEST (PUNJAB).	76	..	200	..	17	16	..	..	32	..
Hindu	75	..	197	..	15	15	..	..	32	..
Musalman	79	..	206	..	19	16	..	..	31	..
Christian	82	..	221	..	15	13	..	..	32	..
Jain	68	..	184	..	12	12	..	..	31	..
Sikh	72	..	195	..	21	21	..	..	32	..
HIMALAYAN	61	58	148	141	21	18	17	16	35	36
Hindu	61	58	147	140	21	18	17	16	35	36
Musalman	61	57	174	150	19	15	16	13	34	37
Christian	48	54	183	204	7	10	9	8	22	22
Jain	32	53	96	186	18	19	19	12	41	27
Sikh	53	52	152	137	15	14	15	14	37	39
SUB-HIMALAYAN	78	71	196	182	22	19	18	16	31	33
Hindu	71	65	187	174	20	19	16	16	32	33
Musalman	81	75	200	187	23	19	18	15	31	33
Christian	78	66	233	241	16	16	9	12	30	30
Jain	68	59	188	182	14	13	12	13	32	29
Sikh	74	67	190	173	24	21	20	18	32	34
NORTH-WEST DRY AREA	83	81	219	209	17	15	16	14	31	32
Hindu	74	70	203	188	13	13	12	13	32	34
Musalman	85	83	221	212	18	15	17	15	31	32
Christian	94	84	255	281	16	14	13	12	30	27
Jain	62	69	203	163	9	10	5	9	31	37
Sikh	85	77	219	202	18	16	15	13	32	34
DELHI	54	..	150	..	9	10	..	..	38	..
INDO-GANGETIC PLAIN WEST	54	..	150	..	9	10	..	..	38	..
Hindu	53	..	146	..	9	10	..	..	39	..
Musalman	58	..	161	..	11	11	..	..	37	..
Christian	40	..	155	..	4	6	..	..	35	..
Jain	52	..	162	..	12	11	..	..	32	..
Sikh	29	..	134	..	4	5	..	..	15	..

SUBSIDIARY TABLE VI.
Variation in Population at certain age-periods.

DISTRICT OR STATE AND NATURAL DIVISION.	Period.	Variation per cent. in Population (Increase +, Decrease -).					
		All ages.	0-9 (inclusive).	10-14 (inclusive).	15-39 (inclusive).	40-59 (inclusive).	60 and over.
1	2	3	4	5	6	7	8
PUNJAB AND DELHI	1891-1901	+8.2	-5.1	+27.2	-2	+27.1	+108.9
	1901-1911	-2.2	+3	-6.2	-1.9	-3.2	-4.6
	1911-1921	+5.8	+10.8	+10.1	-1	+4.2	+18.3
I. INDO-GANGETIC PLAIN WEST (TOTAL) ..	1891-1901	+6.8	-8.2	+24.3	-2.4	+28.5	+120.9
	1901-1911	-7.9	-6.2	-12.9	-5.8	+10.6	-12.9
	1911-1921	+8.2	+17.2	+12.8	+3	+5.7	+24.1
1. Hissar	1891-1901	+7	-24.7	+24.3	+0	+26.1	+85.3
	1901-1911	+3.0	+18.0	-23.3	+6.3	-3.2	-3.9
	1911-1921	+1.5	+15.5	+30.1	-12.4	-3.1	+14.7
2. Loharu State	1891-1901	-24.4	-47.3	-5.6	-22.5	-11.6	+69.0
	1901-1911	+22.1	-57.6	-14.7	+15.1	+19.2	+34.2
	1911-1921	+10.9	+30.3	+32.5	-6.6	+5.6	+9.3
3. Rohtak	1891-1901	+6.8	-5.2	+25.1	-4.7	+33.6	+11.8
	1901-1911	-14.1	-15.7	-16.9	-9.7	-19.1	-17.0
	1911-1921	+42.6	+63.8	+41.2	+33.0	+34.0	+45.9
4. Dujana State	1891-1901	-8.6	-27.5	+15.5	-15.8	+13.4	+96.3
	1901-1911	+5.4	+18.4	-15.8	+5.1	+1.1	+12.0
	1911-1921	+1.4	+6.9	+24.3	-8.7	-3.0	+11.1
5. Gurgaon	1891-1901	+11.6	+8.6	+23.2	-6.1	+47.3	+185.1
	1901-1911	-13.8	-23.0	+4	-11.0	-14.4	-14.1
	1911-1921	+6.0	+20.6	-3.6	+2.8	-2.3	+12.3
6. Patnauli State	1891-1901	+15.4	+13.0	+32.8	-2.7	+36.3	+224.2
	1901-1911	-10.9	-19.3	+2.9	-11.6	-4.5	-9.9
	1911-1921	-7.4	+3.8	-7.4	-11.8	-15.0	-1.6
7. Karnal	1891-1901	+29.2	+15.4	+49.0	+17.3	+64.6	+159.1
	1901-1911	-9.4	-10.6	-13.6	-6.7	-10.7	-13.0
	1911-1921	+3.6	+19.8	+3.5	-5.4	-6	+18.4
8. Jullundur	1891-1901	+1.1	-13.3	+30.0	-9.1	+14.2	+116.2
	1901-1911	-12.6	-11.6	-15.7	-12.8	-11.1	-14.2
	1911-1921	+2.6	+6.5	+1.8	-2.7	+3	+23.2
9. Kaqurthala State	1891-1901	+4.9	-8.0	+31.0	-5.8	+23.1	+112.6
	1901-1911	-14.7	-15.2	-9.0	-15.2	-15.4	-17.9
	1911-1921	+6.6	+11.2	-4.1	+2.7	+3.6	+29.8
10. Ludhiana	1891-1901	+3.8	-9.4	+11.7	-5.6	+22.4	+135.4
	1901-1911	-23.2	-21.5	-24.4	-20.7	-25.4	-35.0
	1911-1921	+9.7	+18.6	+11.0	+4	+9.0	+35.2
11. Malerkotla State	1891-1901	+2.3	-19.0	+20.7	-8.0	+21.1	+176.6
	1901-1911	-8.2	-12.2	-19.8	+1.8	-19.9	-23.6
	1911-1921	+12.9	+19.5	+13.6	+4.7	+13.0	+42.1
12. Ferozepore	1891-1901	+8.1	-11.6	+30.4	+4.0	+32.0	+04.4
	1901-1911	+2	+6.7	-16.3	+2.8	-3.6	-1.3
	1911-1921	+14.4	+22.1	+33.6	+1.9	+13.9	+35.6
13. Faridkot State	1891-1901	+8.6	-13.2	+24.0	+8.4	+32.7	+103.1
	1901-1911	+4.3	+10.7	-13.6	+7.1	+4	+4.1
	1911-1921	+15.6	+18.9	+41.4	+3.9	+17.8	+34.9
14. Patiala State	1891-1901	+8	-16.1	+9.0	-6.3	+26.2	+125.9
	1901-1911	-11.8	-4.3	-20.9	-9.4	-18.6	-19.0
	1911-1921	+6.5	+17.7	+18.7	-4.8	+4.9	+5.9
15. Jind State	1891-1901	-9	-19.1	+16.5	-8.4	+26.2	+121.4
	1901-1911	-3.0	+3.2	-17.8	+5	-11.7	-5.2
	1911-1921	+13.4	+31.6	+26.8	-9	+9.3	+24.8
16. Nabha State	1891-1901	+5.4	-11.6	+16.6	-3.2	+29.8	+153.2
	1901-1911	-16.5	-12.0	-24.3	-14.4	-20.9	-18.8
	1911-1921	+5.8	+12.4	+16.7	-3.9	+6.2	+22.7

SUBSIDIARY TABLE VI.

Variation in Population at certain age-periods—continued.

DISTRICT OR STATE AND NATURAL DIVISION.	Period.	Variation per cent. in Population (Increase +, Decrease -).					
		All ages.	0-9 (inclusive).	10-14 (inclusive).	15-39 (inclusive).	40-59 (inclusive).	60 and over.
1	2	3	4	5	6	7	8
17. Lahore	1891-1901 1901-1911 1911-1921	+8.1 -10.8 +9.2	-8.1 -11.8 +15.3	+36.6 -21.5 +11.3	+1.7 -7.2 +2.5	+26.1 -9.6 +9.2	+10.4 -13.0 +26.7
18. Amritsar	1891-1901 1901-1911 1911-1921	+3.1 -14.0 +5.5	-12.1 -15.5 +11.3	+33.8 -12.7 -1	-5.8 -12.3 -9	+18.1 -13.6 +4.4	+115.5 -18.9 +23.8
19. Gujranwala	1891-1901 1901-1911 1911-1921	+9.7 +22.0 -32.5	+4.3 +27.0 -38.3	+10.9 -32.7 -27.9	+1.3 +17.6 -32.9	+20.3 +20.2 -27.1	+109.3 -13.4 -24.2
20. Sheikhpura	1891-1901 1901-1911 1911-1921	Included in the District of Lahore, Gujranwala and Sialkot.					
		+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
II. HIMALAYAN	1891-1901 1901-1911 1911-1921	+2.7 +2.0 +8	-11.7 +3.7 +2.5	+18.2 +6.9 +3.0	+4.7 +1.7 +2.8	+22.3 +4.5 +9	+82.0 +7.4 +12.4
21. Nahan State	1891-1901 1901-1911 1911-1921	+9.3 +2.1 +1.4	+6.6 +4.2 -2.2	+23.2 -11.2 +15.5	+1.7 +4.1 -1.1	+45.3 +2.5 +3.6	+133.9 +9.5 +7.1
22. Simla	1891-1901 1901-1911 1911-1921	-9.6 -2.6 +15.3	-26.7 +4.1 +2.1	+3.1 +1.2 +3.8	-13.9 5.6 +23.4	+13.4 -4.6 +10.8	+74.8 +11.6 +14.6
23. Simla Hill States	1891-1901 1901-1911 1911-1921	+5.2 +3.9 +1	-10.1 -6.2 -2.2	+15.0 -3.7 +1.2	-1.9 +3.2 -2.6	+27.7 +6.1 +1.1	+78.0 +6.6 +13.6
24. Bilaspur State	1891-1901 1901-1911 1911-1921	Included in Simla Hill States.					
		+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
25. Kangra	1891-1901 1901-1911 1911-1921	+7 +3 -6	-12.9 +2.9 +3.2	+18.8 -10.5 +1.2	-7.6 +3 -5.5	+21.0 +3.6 -9	+82.5 +8.9 +12.7
26. Mandi State	1891-1901 1901-1911 1911-1921	+5.1 +3.2 +2.2	-7.3 -2.4 +7.0	+17.5 -1.5 +5.1	+1.1 +3.1 -2.7	+13.7 +7.1 +9	+67.9 +5.4 +12.4
27. Suket State	1891-1901 1901-1911 1911-1921	+1.6 +3.2 -1.1	-19.9 -2.1 +3.9	+17.1 -1.5 -9.6	+1.8 +3.1 -4.3	+11.2 +7.1 +1.0	+88.1 +5.4 +15.9
28. Chamba State	1891-1901 1901-1911 1911-1921	+3.1 +6.3 +4.4	-11.1 +7.7 +4.4	+29.5 +2.2 -9.8	-5.1 +7.7 +1.3	+12.5 +5.0 +5.1	+77.0 +3.7 +11.1
III. SUB-HIMALAYAN	1891-1901 1901-1911 1911-1921	-4.1 -5.9 +6	-15.7 -3.2 +3.7	+11.2 -7.4 +3.9	-12.0 -7.4 -5.1	+12.8 -5.8 -7	+81.7 +6.0 +14.7
29. Ambala	1891-1901 1901-1911 1911-1921	-21.1 -15.4 -1.2	-32.7 -14.9 +10.9	+16.1 -26.3 -1	-27.1 -13.3 -13.8	+1.9 -16.8 -1.3	+67.2 -19.5 +18.9
30. Kalsia State	1891-1901 1901-1911 1911-1921	-2.1 -16.8 +2.6	-17.3 -17.0 +11.1	+7.1 -22.1 -10.6	-9.6 -13.7 -5.2	+25.1 -19.7 +5.4	+122.6 -17.9 +22.7
31. Hoshiarpur	1891-1901 1901-1911 1911-1921	-2.2 -7.2 +3.9	-16.7 -4.8 +4.8	+16.2 -10.1 +9	-10.5 -8.3 -4.3	+14.5 -7.7 +8	+85.2 -3.4 +14.5
32. Gurdaspur	1891-1901 1901-1911 1911-1921	-4 -11.0 +1.8	-13.9 -7.3 +5.3	+31.2 -12.0 +6.2	-10.1 -12.0 -3.6	+17.0 -13.1 -4	+112.9 -13.8 +17.8

SUBSIDIARY TABLE VI.

Variation in Population at certain age-periods—concluded.

DISTRICT OR STATE AND NATURAL DIVISION.	Period.	Variation per cent. in Population (Increase +, Decrease—).					
		All ages.	0—9 (inclusive).	10—14 (inclusive).	15—39 (inclusive).	40—59 (inclusive).	60 and over.
1	2	3	4	5	6	7	8
33. Sialkot	1891—1901 ..	-3.2	-10.2	+10.6	-12.8	+7.0	+91.2
	1901—1911 ..	-9.6	-6.0	-2.5	-14.1	-8.9	-12.7
	1911—1921 ..	-4.3	-5.9	+9	-7.8	-2.7	+9.0
34. Gujrat	1891—1901 ..	-1.4	-14.1	+7.7	-6.9	+14.7	+80.2
	1901—1911 ..	-7	+4.1	-3.3	-4.6	+1.0	+2.5
	1911—1921 ..	+10.5	+11.5	+19.1	+4.4	+12.0	+20.9
35. Jhelum	1891—1901 ..	-2.5	-14.8	+11.9	-7.7	+11.5	+52.2
	1901—1911 ..	-13.9	-16.5	-17.3	-12.7	-10.2	-13.4
	1911—1921 ..	-6.7	-5	-2.6	-14.8	-7.5	+8.8
36. Rawalpindi ..	1891—1901 ..	+4.0	-8.3	+25.6	-2.8	+27.1	+76.7
	1901—1911 ..	-41.1	-43.2	+43.0	-40.1	-40.0	-38.0
	1911—1921 ..	+3.9	+6.2	+2.3	+1.6	+2.9	+13.9
37. Attock	1891—1901 ..	Not available.					
	1901—1911 ..	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
	1911—1921 ..	-1.3	-0	+3.4	-6.9	+2	+13.9
IV. NORTH-WEST DRY AREA ..	1891—1901 ..	+39.7	+23.7	+75.2	+32.4	+51.7	+142.4
	1901—1911 ..	+15.1	+17.1	+12.9	+13.6	+17.8	+12.7
	1911—1921 ..	+7.9	+8.7	+14.3	+5.2	+6.3	+13.7
38. Montgomery ..	1891—1901 ..	-7.2	-21.4	+22.1	-9.6	+1.4	+44.9
	1901—1911 ..	+15.5	+21.2	+5.2	+14.3	+15.3	+15.8
	1911—1921 ..	+33.3	+33.1	+44.2	+30.2	+31.2	+38.7
39. Shahpur	1891—1901 ..	+6.2	-8.0	+25.0	+1.2	+19.4	+74.2
	1901—1911 ..	+13.1	+33.2	+28.2	+36.3	+27.6	+8.2
	1911—1921 ..	+4.7	+7.4	+4.4	-1.2	+9.5	+18.5
40. Mianwali	1891—1901 ..	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
	1901—1911 ..	-19.6	-16.8	-18.2	-23.8	-17.2	-16.7
	1911—1921 ..	+4.9	+1.8	+6.1	+7.0	+4.0	+9.7
41. Lyallpur	1891—1901 ..	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
	1901—1911 ..	-8.3	+21.3	+6	+3.2	+2.1	+10.3
	1911—1921 ..	+14.3	+16.6	+34.7	+5.7	+11.9	+24.6
42. Jhang	1891—1901 ..	-13.3	-24.9	+5.5	-16.2	-6.4	+40.6
	1901—1911 ..	+36.1	+38.3	+36.4	+35.6	+36.9	+27.3
	1911—1921 ..	+10.7	+14.3	+13.0	+5.7	+10.7	+17.6
43. Multan	1891—1901 ..	+12.5	+4.3	+23.8	+5.9	+17.6	+108.1
	1901—1911 ..	+14.7	+14.0	+18.6	+10.7	+23.3	+16.6
	1911—1921 ..	+9.2	+9.1	+14.2	+9.0	+5.6	+11.3
44. Bahawalpur State ..	1891—1901 ..	+10.9	-2.4	+51.0	+1.3	+24.5	+143.7
	1901—1911 ..	+8.3	+5.2	+6.0	+9.5	+15.6	+1.2
	1911—1921 ..	+1	+1.8	+1.7	-5	-4.3	+4.8
45. Muzaffargarh ..	1891—1901 ..	+6.4	-3.1	+38.9	-9.9	+12.4	+98.7
	1901—1911 ..	+40.4	+37.9	+36.1	+28.2	+51.9	+49.2
	1911—1921 ..	-2	-1.7	+6.0	-2	-2.2	+1.4
46. Dera Ghazi Khan ..	1891—1901 ..	+14.9	+6.9	+44.3	+4.8	+25.4	+110.5
	1901—1911 ..	+12.2	+8.7	+13.7	+11.8	+18.2	+14.9
	1911—1921 ..	-6.2	-9.3	-1.8	-4.6	-5.7	-8.9

SUBSIDIARY TABLE VII.

Reported birth-rate by sex and Natural Divisions.

(FOR BRITISH TERRITORY ONLY).

YEAR.	NUMBER OF BIRTHS PER 1,000 OF TOTAL POPULATION (CENSUS OF 1911.)											
	Punjab.		Indo-Gangetic Plain West.		Himalayan.		Sub-Himalayan.		North-West Dry Area.		Delhi.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	2	3	4	5	6	7	8	9	10	11	12	13
1911	23	21	24	22	18	17	22	20	23	20	21	20
1912	23	21	25	23	20	18	23	21	23	20	24	23
1913	23	21	25	23	19	18	23	21	23	20	22	21
1914	24	22	26	24	18	17	23	21	23	21	24	23
1915	23	21	24	22	19	18	21	20	22	19	25	24
1916	24	21	25	23	17	16	22	20	24	21	26	24
1917	23	21	26	24	19	17	22	20	22	19	28	26
1918	21	18	22	20	19	17	21	19	18	16	25	23
1919	21	19	22	20	17	15	19	17	22	19	21	22
1920	22	20	23	21	18	17	21	19	23	20	24	23

NOTE.—(a) Figures of population are those given in Imperial Table II of 1921 for 1911, and do not include figures for Biloch Trans-Frontier Tract.

(b) Figures of births of 1911 and 1912 for Delhi not being available, the adjusted figures for 1911 and the average of the remaining years for 1912, have been assumed to represent the figures of each of these years.

SUBSIDIARY TABLE VIII.

Reported death-rate by sex and Natural Divisions.

(FOR BRITISH TERRITORY ONLY.)

YEAR.	NUMBER OF DEATHS PER 1,000 OF TOTAL POPULATION (CENSUS OF 1911.)											
	Punjab.		Indo-Gangetic Plain West.		Himalayan.		Sub-Himalayan.		North-West Dry Area.		Delhi.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13
1911	31	36	34	41	30	33	33	37	23	25	50	60
1912	25	28	27	30	24	27	25	28	22	23	40	50
1913	28	32	31	35	25	27	29	32	24	26	35	42
1914	30	34	32	37	28	31	30	35	25	28	33	41
1915	33	39	34	39	29	32	31	42	25	27	27	32
1916	29	32	29	33	33	36	30	33	27	31	30	37
1917	35	40	34	40	30	31	32	36	31	47	30	37
1918	74	87	86	108	51	52	63	72	70	77	61	111
1919	27	29	28	31	30	32	26	28	26	27	38	47
1920	28	29	28	30	40	40	29	29	24	25	33	30

NOTE.—(a) Figures of population are those given in Imperial Table II of 1921 for 1911, and do not include figures for Biloch Trans-Frontier Tract.

(b) Figures of deaths of 1911 and 1912 for Delhi not being available, the adjusted figures for 1911 and the average of the remaining years for 1912, have been assumed to represent the figures of each of these years.

(c) Total mortality attributable to Influenza in 1918 was 982,937 and 23,176 in the Punjab and Delhi respectively which is equivalent to nearly 5 per cent. of the population of 1911 for both the provinces.

SUBSIDIARY TABLE IX.

Reported death-rate by sex and age in decade and in selected years *per mille* living at same age according to the Census of 1911 (for Punjab and Delhi, British Territory only).

Age.	AVERAGE OF DECADE.		1913.		1911.		1915.		1916.		1917.		1918.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
All ages	34	39	28	32	30	34	33	39	29	32	35	40	74	88
Under 1	225	215	242	239	237	230	201	193	225	211	274	262	257	243
1-4 (inclusive)	62	65	62	65	61	65	19	52	71	74	87	94	97	99
5-9 (inclusive)	15	18	11	12	12	14	16	21	12	13	16	18	38	47
10-14 (inclusive)	13	18	8	11	9	14	16	25	7	16	9	12	39	57
15-19 (inclusive)	15	20	8	11	10	14	18	17	8	11	10	13	55	76
20-29 (inclusive)	16	26	16	12	11	14	11	20	8	11	10	14	59	76
30-39 (inclusive)	19	24	12	15	13	17	21	26	11	14	13	17	65	81
40-49 (inclusive)	25	26	16	16	19	19	27	29	16	16	20	20	72	81
50-59 (inclusive)	36	38	14	19	27	29	37	41	26	26	32	31	97	110
60 and over	79	84	36	62	69	75	84	86	71	75	86	89	146	165

NOTE.—Figures of population are those given in Imperial Table VII of 1911.

SUBSIDIARY TABLE X.

Reported deaths from certain diseases *per mille* of each sex.

YEAR.	ACTUAL NUMBER OF DEATHS IN										DELHI.			
	PUNJAB.					Himalayan.					North-West Dry Area.		Actual number of deaths.	
	Ratio <i>per mille</i> of each sex.					Indo-Gangetic Plain West.					Sub-Himalayan.		Ratio <i>per mille</i> of each sex.	
	Total.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.	Males.	Females.
FEVERS														
1911	4,441,214	2,287,531	2,153,683	213	245	995,475	945,439	86,489	84,308	11	12	541,540	18	19
1912	293,929	154,406	139,523	14	16	63,371	56,675	7,825	7,728	45,530	41,870	33,220	222	301
1913	273,040	143,313	131,727	13	15	60,423	54,626	6,097	6,180	42,177	39,719	37,660	14	28
1914	331,688	170,474	161,214	16	19	72,121	67,085	6,322	6,597	52,230	50,041	37,591	22	30
1915	345,301	175,335	169,966	16	19	73,755	69,528	6,826	6,944	50,734	50,403	37,591	23	28
1916	284,784	146,631	138,133	14	16	69,212	66,288	6,728	6,888	40,733	39,205	32,582	18	23
1917	376,003	193,533	182,450	18	21	77,239	71,612	8,870	8,870	59,229	57,405	44,361	15	19
1918	510,812	259,959	250,853	24	28	101,476	97,306	7,132	6,852	64,544	62,106	51,467	15	19
1919	1,487,010	631,480	655,530	61	72	315,100	322,035	16,396	15,430	171,275	169,487	147,085	53	59
1920	365,045	182,458	182,586	18	20	83,704	74,535	8,269	8,311	52,227	47,484	42,340	23	25
PLAGUE														
1911	371,432	199,761	171,671	19	19	88,086	75,369	11,004	10,592	53,938	47,925	37,731	10	10
1912	628,349	308,659	319,690	29	36	183,768	161,344	74	91	129,426	135,672	22,883	827	5
1913	169,818	81,997	87,821	8	10	47,090	48,707	11	13	25,776	32,519	6,112	10	1
1914	29,805	14,825	14,980	1	2	8,308	7,907	..	..	3,765	6,991	6,439	..	..
1915	17,877	8,941	8,936	1	1	6,942	6,947	6	3	1,940	1,937	1,937	..	..
1916	64,010	32,048	31,962	3	4	17,894	16,871	7	11	11,585	12,676	2,504	..	..
1917	221,068	108,320	112,748	10	13	42,327	41,213	9	14	58,132	64,363	7,812	..	..
1918	3,278	1,639	1,639	..	..	416	443	..	..	1,135	1,174	28	..	..
1919	8,775	4,436	4,339	..	..	2,359	2,155	0	16	1,810	1,132	69	..	..
1920	93,615	48,408	45,207	5	6	33,401	32,086	32	33	16,816	12,063	3,039	186	1
SMALL POX														
1911	11,068	5,394	5,674	1	1	3,397	3,653	..	..	1,112	1,112	21	..	..
1912	6,137	3,035	3,102	..	..	1,363	1,377	..	..	975	1,181	82	..	..
1913	5,081	2,410	2,671	..	..	2,417	2,546	295	131	15,404	14,939	567	..	..
1914	30,339	15,761	14,578	2	2	1,249	1,249	..	..	656	611	15,181	433	2
1915	38,687	20,126	18,561	2	2	6,738	6,176	71	42	4,315	4,327	1,033	..	..
1916	2,940	1,519	1,421	..	..	8,483	7,525	83	59	5,459	5,328	5,190	..	..
1917	1,694	888	806	..	..	950	809	9	10	268	236	216	..	..
1918	2,886	1,531	1,355	..	..	634	588	..	..	71	68	148	..	..
1919	1,417	709	708	..	..	838	743	..	..	172	163	151	..	..
1920	3,032	1,596	1,436	..	..	468	498	..	..	518	448	448	..	..
CHOLERA														
1911	15,365	8,103	7,262	1	1	1,280	1,249	13	11	112	112	129	..	..
1912	9,319	5,148	4,171	..	..	3,462	3,094	93	42	2,771	2,584	1,512	..	..
1913	40,706	23,438	17,268	2	2	14,106	9,991	672	553	1,497	1,247	3,609	..	..
1914	1,238	591	647	..	..	719	719	..	..	5,891	4,527	2,197	352	1
1915	1,081	581	500	..	..	378	378	..	..	741	741	22	..	..
1916	5,811	3,267	2,544	..	..	2,384	1,715	10	8	269	208	197	..	..
1917	3,857	2,793	1,064	..	..	2,507	1,753	207	148	821	773	52	..	..
1918	13,196	7,513	5,683	..	..	5,295	3,907	401	376	634	574	419	..	..
1919	1,651	890	761	..	..	618	491	11	11	226	139	63	..	..
1920	1,305	802	503	..	..	229	116	11	5	421	336	141	..	..
1911	9,591	4,856	4,735	1	1	1,941	1,341	12	21	1,791	1,308	1,296	..	..
1912	138	80	58	..	..	46	33	..	..	211	211	8	..	..

SUBSIDIARY TABLE XI.

The ratio of the number of males, females and persons per 100,000 at the census of 1911 to those of the census of 1921, for each year of age, as recorded in the census schedules.

Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.	Age.	Males.	Females.	Persons.
1	2	3	4	1	2	3	4	1	2	3	4
Under 1	113	115	115	34	116	84	104	68	90	57	82
1	107	103	109	35	93	98	94	69	28	30	33
2	93	99	95	36	130	115	126	70	94	92	93
3	102	100	102	37	92	85	87	71	59	100	121
4	91	94	95	38	109	105	108	72	44	55	51
5	92	92	94	39	69	93	67	73	33	40	39
6	96	92	96	40	110	115	111	74	33	50	42
7	86	90	90	41	119	156	131	75	47	65	59
8	93	88	93	42	104	102	103	76	71	69	65
9	91	86	90	43	121	93	108	77	21	67	23
10	96	89	94	44	89	101	97	78	22	60	36
11	82	90	85	45	106	90	98	79	54	47	44
12	100	98	102	46	116	130	124	80	110	71	96
13	94	86	90	47	92	86	87	81	62	67	55
14	106	96	103	48	102	85	94	82	68	93	88
15	102	94	95	49	38	60	43	83	86	0	75
16	116	115	116	50	108	107	106	84	56	80	71
17	96	98	95	51	119	129	120	85	51	55	57
18	108	106	106	52	88	72	84	86	60	67	20
19	86	82	85	53	91	92	88	87	50	0	33
20	122	116	116	54	98	60	78	88	200	25	83
21	94	97	94	55	80	79	80	89	200	225	200
22	110	111	107	56	120	131	118	90	123	56	95
23	89	111	95	57	77	107	82	91	0	200	40
24	94	116	100	58	74	73	74	92	175	14	66
25	115	112	112	59	22	53	29	93	480	800	450
26	116	118	114	60	85	98	91	94	66	67	67
27	113	132	117	61	95	107	95	95	55	50	52
28	119	101	109	62	74	70	75	96	250	10	50
29	74	80	80	63	53	86	63	97	66	133	67
30	109	110	107	64	54	29	42	98	0	67	25
31	82	130	99	65	75	64	70	99	100	33	67
32	109	112	113	66	92	83	88	100 and over		88	87
33	120	107	116	67	138	105	127				

SUBSIDIARY TABLE XII.

Statement showing the Births and Deaths since 1881, Punjab (British Territory) including Delhi.

Year.	MALES.			FEMALES.			Ratio births females/males = column 8/column 2.	Ratio deaths females/males.
	Births.	Deaths.	Excess of births over deaths in the year.	Births.	Deaths.	Excess of births over deaths in the year.		
1	2	3	4	5	6	7	8	9
PUNJAB AND DELHI (1881—1890)	3,930,353	3,111,155	+819,198	3,407,650	2,746,390	+661,260	87	88
1881	374,599	279,274	+95,325	321,167	240,505	+80,662	86	86
1882	371,136	271,018	+100,118	319,388	233,781	+85,607	86	86
1883	393,321	256,348	+136,973	341,591	219,393	+122,198	87	86
1884	432,806	344,547	+88,259	377,106	315,751	+61,355	87	92
1885	390,799	269,894	+120,905	341,135	237,246	+103,889	87	88
1886	398,179	266,879	+131,300	345,566	231,387	+114,179	87	88
1887	392,469	343,479	+48,990	340,179	392,905	-52,726	87	88
1888	376,678	299,415	+77,263	326,435	263,814	+62,621	87	88
1889	406,658	315,146	+91,512	352,391	280,614	+71,777	87	89
1890	393,708	165,155	+228,553	342,698	417,994	-75,296	87	90
PUNJAB AND DELHI (1891—1900)	4,048,998	3,342,579	+706,419	3,668,763	3,067,397	+601,366	91	92
1891	341,158	289,770	+51,388	301,911	251,414	+50,497	88	87
1892	380,672	475,122	-94,450	338,240	432,814	-94,574	89	91
1893	350,215	280,423	+69,792	314,068	217,095	+96,973	90	88
1894	433,731	363,881	+69,850	391,359	332,515	+58,844	90	91
1895	428,727	289,446	+139,281	391,148	258,868	+132,280	91	89
1896	420,759	305,698	+115,061	385,258	276,591	+108,667	92	91
1897	415,410	289,543	+125,867	379,559	275,733	+103,826	91	95
1898	403,231	296,188	+107,043	367,488	278,620	+88,868	91	91
1899	474,937	284,385	+190,552	435,672	260,002	+175,670	92	94
1900	400,158	467,823	-67,665	364,060	447,115	-83,055	91	96
PUNJAB AND DELHI (1901—1910)	4,340,338	4,459,990	-119,652	3,945,923	4,383,718	-437,795	91	98
1901	373,466	372,350	+1,116	339,067	354,261	-15,194	91	95
1902	461,952	443,473	+18,479	418,525	413,500	+5,025	91	100
1903	452,622	486,802	-34,180	410,210	498,674	-88,464	91	102
1904	430,658	480,250	-49,592	397,371	506,298	-108,927	91	105
1905	467,536	475,973	-8,437	425,824	480,135	-54,311	91	101
1906	459,329	374,880	+84,449	418,677	368,026	+50,651	91	98
1907	430,253	637,357	-207,104	389,318	611,372	-222,054	90	95
1908	439,539	517,219	-77,680	400,522	502,906	-102,384	91	97
1909	369,694	326,613	+43,081	336,216	294,470	+41,746	91	90
1910	449,269	345,073	+104,196	410,163	324,166	+85,997	91	94
PUNJAB AND DELHI (1911—1920)	4,546,642	3,754,066	+792,576	4,121,854	3,489,687	+632,167	91	93
1911	462,277	345,899	+116,378	413,336	326,020	+87,316	91	94
1912	408,152	278,864	+129,288	427,511	254,426	+173,085	91	91
1913	468,597	312,500	+156,097	427,505	287,161	+140,344	91	92
1914	478,123	325,980	+152,143	436,270	307,166	+129,104	91	94
1915	451,200	360,060	+91,140	411,781	348,561	+63,220	91	95
1916	472,188	316,924	+155,264	429,937	290,463	+139,474	91	92
1917	470,666	385,645	+85,021	428,049	361,084	+66,965	91	94
1918	414,985	815,972	-400,987	370,451	788,571	-418,120	89	97
1919	423,011	300,123	+122,888	374,921	265,448	+109,473	89	88
1920	447,443	306,093	+141,350	402,093	260,787	+141,306	90	86

CHAPTER VI.

Sex.

123. Nature of the data. 124. The proportion of the sexes. 125. Comparison with other provinces, places and censuses. 126. Proportion of females to males in different castes. 127. Proportion of females to males in the different age-groups.

Nature of
the Data.

123. The only instruction to be noted as regards the entry of sex in column 5 of the enumeration schedule is that, eunuchs and hermaphrodites should be entered in the column as males. Thus, though in certain parts of the Punjab (Delhi for example) there exists a fair number of eunuchs, no separate record of these has been obtained. No separate reference need be made to any of the Imperial or Provincial tables contained in Parts II and III, as practically all the census statistics have been classified according to sexes, and only the following references to the subsidiary tables printed at the end of this chapter will be necessary.

Subsidiary Table I gives the general proportion of the sexes by natural divisions, districts and States, both for the actual and "natural" population, the "natural" population excluding those who were born outside the Punjab and enumerated within it, and including those enumerated outside the Province, so far as they are known, and born within the Punjab. The corresponding figures for all the censuses since 1881, inclusive, are also given in this table.

Subsidiary Table II gives the number of females per 1,000 males for different age-periods by religions at each of the last 3 censuses, for the Punjab and Delhi together, and also for the Punjab and Delhi separately, for the Census of 1921.

Subsidiary Table III gives the proportion of females for different religions by age-groups for the Indo-Gangetic Plain West, Himalayan, Sub-Himalayan, and the North-West Dry Area, separately.

Subsidiary Table IV gives the number of females per 1,000 males for certain selected castes, the caste names under each religion being entered in alphabetical order.

Subsidiary Table V gives the actual number of births and deaths reported for each sex for each year since 1891 for British Territory only, and gives also the number of female to male births, as well as the proportion of female to male deaths for the same periods.

Subsidiary Table VI gives the number of deaths for each sex at different ages, for the six years 1913-1918 inclusive, the figures for the Punjab and Delhi being exhibited separately.

Subsidiary Table VII gives the proportion of females per 1,000 males for each Tahsil and State for the Census of 1921, these figures being necessary in order to construct the isopleths of distribution of similar sex proportions over the Province.

The proportion of the
sexes.

124. In the whole of the Punjab 25,101,060 persons were enumerated, of whom 13,732,048 were males and 11,369,012 were females, being a proportion of 828 females per 1,000 males, while in the Delhi Province out of a population of 488,188 persons there were enumerated 281,633 males and 206,555 females, being a proportion of 733 females per 1,000 males. For the "natural" population the Punjab had 819 females per 1,000 males, and Delhi 788 females per 1,000 males, showing that the efflux of males from the Punjab, and the influx of males into the Delhi Province, were greater than the corresponding efflux and influx of females. In dealing in paragraph 51 of Chapter II with the subject of the accuracy of the census figures, the conclusion was tentatively arrived at that an error of 1 per cent. might be adopted as a working hypothesis of the difference between the actual and the enumerated population. It is now necessary to observe that it seems likely that the greater part of the assumed error will be due to the omission of females, and a relatively smaller part of the inaccuracy will be due to the omission of males. It might be possible, for example, that the error in the enumeration of males amounts to only, say, $\frac{1}{2}$ per cent. whereas the error of omissions in the case of females might amount to over $1\frac{1}{2}$ per cent. Adopting these figures for the error, hypothetically, we find that the percentage error in the *proportion* of males to females in the 1921 Census will be just over 1 per cent. If this is so, all the figures showing the number of females per 1,000 males will have a standard error of about eight or nine. These possibilities must

be borne in mind when comparing the proportions of the sexes at different censuses and in different localities. For example, the number of females per 1,000 males in 1911 was 817, as against 826 in 1921, the difference in these figures being less than the standard error of their difference on the above assumptions, it would be somewhat unsafe to deduce that there has been a real increase in the number of females per 1,000 males during the last decade. The same reasoning would apply in comparing, say, the proportion of females per 1,000 males in Jullundur (807) with that of the adjoining State of Kapurthala (816), it being possible that the observed differences are due solely to errors in enumeration, and not to any fundamental change in racial or economic causes. On the other hand, a difference of 25 in the number of females per 1,000 males in one locality and in another, or in one and the same locality at different epochs, would be double the standard error of the difference and should, therefore, be regarded as of probable significance. Thus, for example, Kangra (946), the Simla Hill States (917), Mandi State (944), and Dujana (908) have almost certainly a greater proportion of females than the Kalsia State (761), Ambala (766), Lahore (751), and Malerkotla (711). Again, in comparing the proportion of females at the 1901 Census with that of 1921 it is probable that the drop in the number of females per 1,000 males from 854 to 826 is a real one.

In comparing the proportion of females per 1,000 males of one religion with another, or of one caste with another caste belonging to the same religion, we might, in certain cases, be rash to accept even a difference of 25 *per mille* as proof of a genuine difference between the proportions of the sexes. On the other hand, in comparing the proportions of the sexes in different age-groups we are probably on fairly safe-ground for ages below 10 and above 30, but between those ages, which are the average marriageable limits for females, it is possible that the sex proportions differ considerably than those given by the returns. Discrepancies may arise from the largely prevailing custom of early marriage, and from the tendency, noted by Rai Bahadur Pandit Hari Kishen Kaul, for the reputed age of a girl to jump straight up to 20 years as soon as she is married. This would account for the great defect in females of ages 10 to 20 which is a feature of the returns for all religions during the last 3 censuses. The point will be further commented on in a subsequent paragraph.

125. The proportion of females to 1,000 males for each of the last 5

Province.	Proportion of females to 1,000 males.				
	1921.	1911.	1901.	1891.	1881.
Bihar and Oriesa ..	1,029	1,043	1,047	1,040	1,024
Madras ..	1,023	1,028	978	1,024	1,014
Central Provinces and Bihar ..	1,002	1,008	1,019	985	973
Burma ..	955	959	963	959	877
Bengal ..	932	945	960	973	994
Bombay ..	919	933	945	938	938
United Provinces of Agra and Oudh ..	909	915	937	930	925
Rajputana Agency ..	899	909	905	891	848
Kashmir State ..	890	886	884	880	..
North-West Frontier Province ..	818	865	833	843	819
Punjab ..	828	817	851	850	844
Coorg ..	831	799	801	804	775
Baluchistan ..	735	788	820	..	..
Andaman and Nicobar ..	302	352	319	167	157
Ajmer Merwara ..	837	884	900	881	851
Assam ..	926	940	949	942	953
Delhi ..	733	944	862	861	896
Baroda State ..	932	925	936	928	917
Central India Agency ..	954	974	973	913	896
Gwalior State ..	880	903	905	..	..
Hyderabad State ..	966	968	964	964	968
Mysore State ..	962	970	981	991	1,006
Sikkim State ..	961	951	916	934	..

Comparison with other provinces, places and censuses.

censuses for various Provinces and States in India is given in the marginal table, and it will be seen that excluding the Andamans and the Delhi Province, which contain an abnormal number of males due to the great number of male convicts in the one case, and to immigration from cooly gangs in the other, the Punjab has the smallest recorded number of females per 1,000 males of any Indian Province or State, with the exception of Baluchistan (735). Without detailed analysis of the figures of other Provinces and States it will be unwise to believe that the whole

of the differences between the proportions of the sexes in the Punjab and other Provinces of India is to be attributed to a real defect in the number of females in the former province. On the other hand, knowing the disregard for female life, except during the marriageable ages, which prevails in the Punjab, it should cause no surprise that females do not outnumber the males. In studying changes in

the number of females *per mille* in the Punjab during the last 40 years, an apparent increase in the number of females is observable from 1881 to 1901: between 1901 and 1911 there was a marked drop from 854 to 817 females per 1,000 males, and between 1911 and 1921 there has been again a rise to 828 *per mille*. That the drop in 1911 and the subsequent rise in 1921 are, at any rate, partially real is indicated by the great female mortality (1,000 females or over per 1,000 males) which obtained during the years 1902 to 1905 inclusive. Since 1891, only in those 4 years and in 1918, the year of the Influenza epidemic, were there more female than male deaths. An exact study of the proportion of female to male births and deaths, and their bearing on the census figures of the proportion of females to males, cannot be undertaken here.

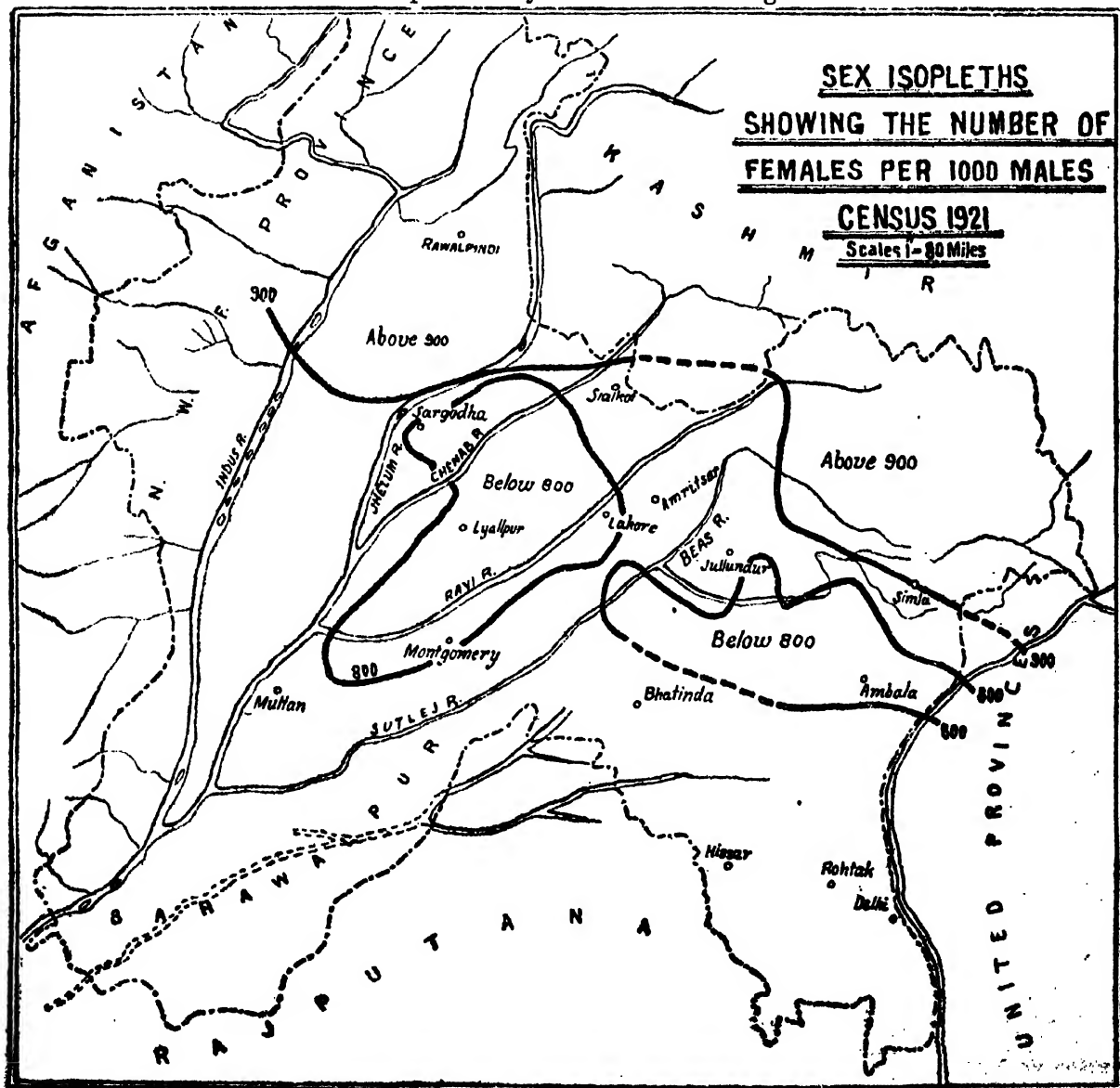
The proportion of females to males for each of the last 5 censuses by

Natural Divisions.	1921.	1911.	1901.	1891.	1881.
Indo-Gangetic Plain West ..	806	795	842	839	836
Himalayan ..	907	911	892	890	878
Sub-Himalayan ..	852	827	880	863	866
North-West Dry Area ..	827	826	838	847	835
Delhi ..	733	..	..	..	..

natural divisions is given in the marginal table. The only observable systematic variation in the figures is that shown by the number of females in the Himalayan Area, which has steadily

increased from 878 *per mille* in 1881 to 907 in 1921. This tract appears to tend to draw away gradually from the rest of the province.

At this stage we may at once compare the proportion of females per 1,000 males for the whole of the province by reference to the diagram below:—



This diagram shows very clearly the feature referred to above namely the high proportion of females in the Himalayan tract. The lowest number of recorded females per 1,000 males occurs in two large areas (which in reality may be only one) stretching across the centre of the Punjab. The general features of the isopleths are explicable as a crater-like area with a central depression, containing a low proportion of women, in the colony areas, and in that part of the Punjab in which Sikhs predominate, and where, at any rate, till recently, female infanticide prevailed*. No finer gradation of the number of females per 1,000 males than by giving the isopleths for 800 and 900 females per 1,000 males, respectively, is attempted, as the previously noted possibilities of error are confirmed by the irregularities of the detailed isopleths.

The effect of immigration and emigration on the proportion of the sexes has already been noted, and the details are given in the table below. Of the total

		1921.				1911.			
		Males.	Females.	Total.	Proportion of females to 1,000 males.	Males.	Females.	Total.	Proportion of females to 1,000 males.
Actual Population.	Total Punjab and Delhi ..	14,013,681	11,575,567	25,589,248	825	13,314,975	10,872,775	24,187,750	817
	Punjab ..	13,732,048	11,369,012	25,101,060	828				
	Delhi ..	281,633	206,555	488,188	733				
Deduct Immigrants.	Total Punjab and Delhi ..	423,341	389,566	812,907	920	352,039	308,180	660,219	875
	Punjab ..	319,309	307,738	627,137	963				
	Delhi ..	103,942	81,828	185,770	788				
Add Emigrants.	Total Punjab and Delhi ..	372,494	246,090	618,584	601	314,789	201,823	516,612	641
	Punjab ..	342,390	206,990	549,386	605				
	Delhi ..	30,098	39,100	69,198	1,290				
Natural Population.	Total Punjab and Delhi ..	13,962,834	11,432,091	25,394,925	812	13,277,725	10,766,418	24,044,143	811
	Punjab ..	13,755,045	11,268,264	25,023,309	812				
	Delhi ..	207,789	163,827	371,616	788				

of 812,907 persons enumerated in the Punjab and Delhi in 1921, but born outside these Provinces, 423,341 were males and 389,566 were females, being a proportion of 920 females per 1,000 males. Of persons born in the Punjab and Delhi and enumerated outside the proportion of females is only 661 per 1,000, the actual numbers being 372,494 males and 246,090 females. The Punjab, therefore, draws to itself more females than it parts with: the effect is not surprising in view of the probable shortage of females in this part of India. The proportion of

Religion.	Actual.				
	1921.	1911.	1901.	1891.	1881.
All Religions	826	817	854	850	844
Jain	853	850	853	872	..
Musalman	843	833	878	871	..
Hindu	825	820	845	843	..
Sikh	764	746	779	784	..
Christian	782	707	580	465	..

females according to religious groups is given in the marginal table, which shows that the proportion of females to 1,000 males descends from the Jain (853), Musalman (843), Hindu (825), Christian (782) and Sikh (764). The only steady variation exhibited by any other of the figures by religion is that exhibited by

Christians which has risen from 465 females *per mille* of males in 1891, to 782 in 1921. This increase must be attributed to conversions from the ranks of low caste Indians, the initially low proportion being due solely to the fewness of female Europeans, who were, not so long ago, the only representatives of the Christian community in the Punjab.

*I do not wish it to be inferred from this that I have any evidence that female infanticide does not still exist in the Central Punjab, but only that I have been out of touch with the local conditions since 1918, and am, therefore, unable to say for certain whether female infanticide still prevails or not. A sudden change in a very established practice of this kind seems unlikely.

Statistically there is very strong evidence for the prevalence of female infanticide in 1921 from the kink in the sex isopleths for 800 females per 1,000 males in the south of the Jullundur district, which is more notorious than any other part of the Punjab for indulgence in this practice.

Proportion
of females to
males in dif-
ferent castes.

126. The detailed figures for all ages, as well as for the quinquennial age-groups up to 40 years of age, are given in Subsidiary Table IV to this chapter. Among Hindus the castes with a high proportion of females are the Ghirath (955), Dagi or Koli (946), both these castes being of low social position, and, therefore, not predisposed to conceal the existence of females, and Kanets (936): while the Hindu castes with a low proportion of females are the Rajput (796), Ahir (794), Jat (789), Chhimba (780), Gujjar (778) and Sansi (720). Among the castes of the latter group, that is, those containing proportionally few females, the Rajput is notorious for his practice of female infanticide; while, of the others the Sansi is a criminal tribe, and the Gujjar, though it numbers a large proportion of agriculturists, is also a caste with a somewhat unsavoury local reputation.*

Among the Sikhs, Khatri alone (917) have a large proportion of females per 1,000 males, while Tarkhans (795), Nais (769) and Jats (726) have the lowest proportion of females. Female infanticide probably accounts for the low proportion of females among Jat Sikhs, but there is no particular evidence of the existence of this custom among Sikh barbers and carpenters. Among Musalmans, the highest proportion of females is found among the Khojas (975), and they are followed by the Maliar (923), Awan (907) and Qassab (904). The two lowest castes are Sheikh (780) and Harni (725): all the other Musalman castes except those mentioned have between 800 and 900 females per 1,000 males. The Harni, like his Hindu *confrere* the Sansi, belongs to a criminal tribe, and the fewness of the number of females among them may be attributed to this cause; but it seems probable that the lowness of the number of females among Sheikhs results from the concealment of the existence of their womenfolk.

The marginal table contrasts the position of certain leading castes in

Caste.	1921.	1911.
Pathan	827	757
Sheikh	780	807
Brahman	821	809
Khatri	825	814
Rajput	845	819
Biloch	835	838
Mughal	889	841
Aggarwal	834	851
Sayad	875	875
Qureshi	884	896

relation to the proportion of females for 1911 and 1921. In 1911 the Pathan had the fewest number of females per 1,000 males, and was followed by the Sheikh, Brahman, Khatri and Rajput in the order named. In 1921 the Sheikh, as already noted, had the fewest number of females, and was followed in order by the Brahman, Khatri, Pathan and Aggarwal. This change in the relative order of the proportion of females in different castes

indicates that physiological causes are probably more potent than social custom, and that it would be rash to associate too closely variations in sex proportions with variation in tribal characteristics. This latter point is very clearly brought out if we correlate the number of females per 1,000 males for each caste as given for 1911, with the corresponding figures for 1921. 57 castes have been so correlated and the co-efficient of correlation is found to be 0.67. Though this is a high correlation, it is very far indeed from being perfect, and shows that during the 10 years elapsing between 1911 and 1921 there has been a very marked change in many castes in the proportion of females to males. Only if we were to correlate the proportion of females per 1,000 males at a considerable interval, say, 100 years, would it be possible to assert that the sex ratio was a tribal characteristic. It is worth recording that the co-efficients of variation of the numbers of females per 1,000 males from caste to caste were almost identical in 1911 and 1921, being 5.68 per cent. for the latter census and 5.72 for the former.

Proportion
of females to
males in the
different age-
groups.

127. We have already seen in paragraph 115 of Chapter V how unreliable are the figures for the age-returns, and in comparing, therefore, the proportion of females to males for the different age-groups we might not unnaturally expect the results to be confusing and inconsistent *inter se*. In the Punjab we cannot even fall back on a scientifically constructed life-table of males and females for the purposes of comparison, as Mr. Acland, who dealt actuarially with the figures for 1911 and constructed a life-table for males, found the figures for female ages too unreliable to graduate. It has been necessary therefore to compare the crude figures of the number of males and females in each age-group, and it

* There is a Punjabi saying that *kuttas aur billi ek, rangar aur gujjar do*, which being interpreted puts these two castes on the level of cat and dog.

is surprising to find that the results for different religions and for different censuses are so accordant. The results are exhibited graphically in the diagrams which follow, and it will be observed that the curve showing the relative numbers of females to males follows similar courses for different religions, and for the same religion at different censuses. The observed correspondence may be due to a reality underlying the phenomena, or it may be spurious. In the latter case the agreement between the sex-age-distributions at different censuses would be explicable by reference to the constancy of the habit of misstatement, which must obtain in any large and conservative population. The correspondence between the curves for Hindus, Musalmans and Sikhs may likewise be a specious correspondence, and arise from the essential homogeneity of the Punjabi population in respect of such traits as the inaccurate statement of ages. For example, in many branches of conduct and in his attitude towards social and economic problems, the Jat Sikh of the Central Punjab resembles the Arain who lives in his own village much more nearly than the latter does a Musalman Arain living in the United Provinces. Nevertheless, it seems improbable that the whole of the correspondence between the different curves showing the proportion of females to males for different ages can be put down to a mere tendency to minimise or exaggerate ages, or to conceal the existence of females of marriageable ages, which is common to all religions in the Punjab. There is a possibility, therefore, of a smaller proportion of females to males between the ages of 10 and 20

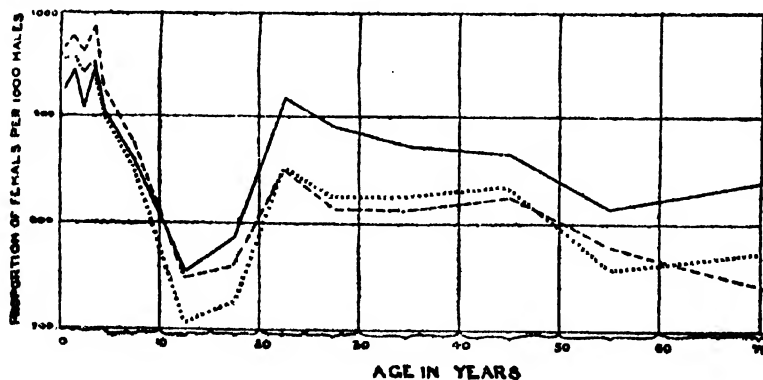
than there is at any other ages. Diagrams 38, 39 and 40 may now be referred to.

Diagram 38.

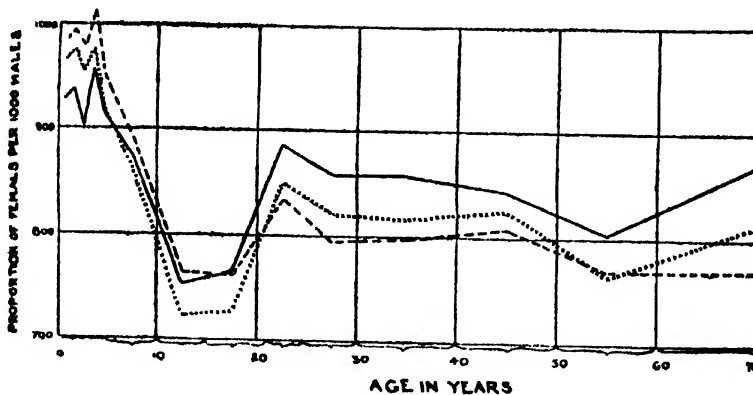
PROPORTION OF FEMALES PER 1000 MALES
ACCORDING TO AGE GROUPS BY RELIGIONS FOR PUNJAB & DELHI
AT CENSUSES OF 1901, 1911, 1921 (VIDE SUBSIDIARY TAB. II CHAR. VI)

1901 ———
 1911 ———
 1921 - - - -

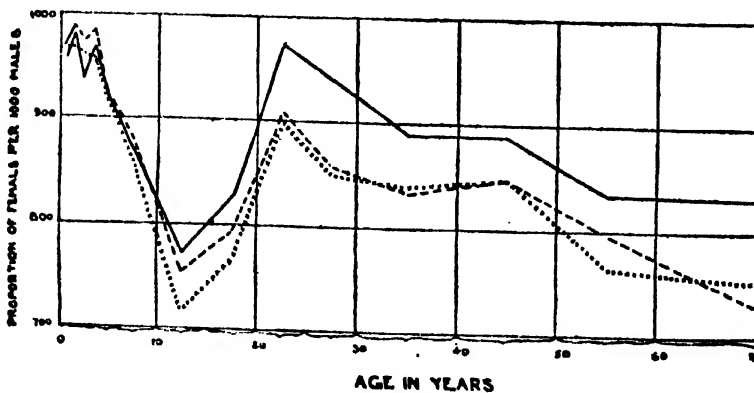
FOR ALL RELIGIONS



FOR HINDUS



FOR MOHAMMADANS



THE CURLY BRACKETS INDICATE THE AGE GROUPS AT THE
 CENTRE OF WHICH THE FREQUENCY IS CONCENTRATED

39

**PROPORTION OF FEMALES PER 1000 MALES
ACCORDING TO AGE GROUPS BY RELIGIONS FOR PUNJAB+DELHI
AT CENSUSES OF 1901, 1911, 1921 (VIDE SUBSIDIARY TAB. II CHAP. III)**

1901 ———
1911 AVERAGE ———
1921 - - - - -

FOR SIKHS

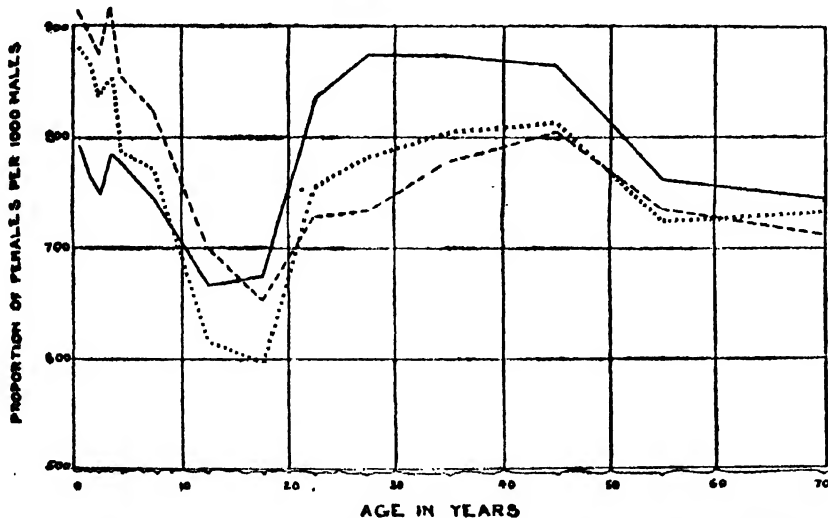
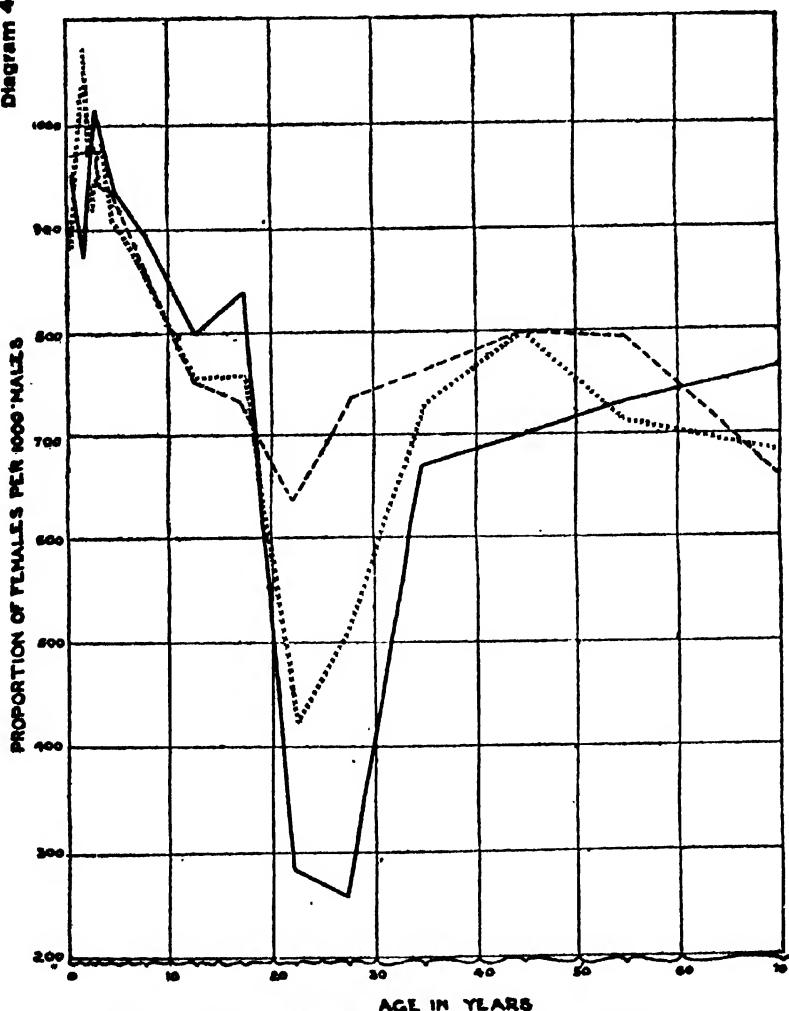


Diagram 40.

1901 ———
1911 AVERAGE ———
1921 - - - - -

FOR CHRISTIANS



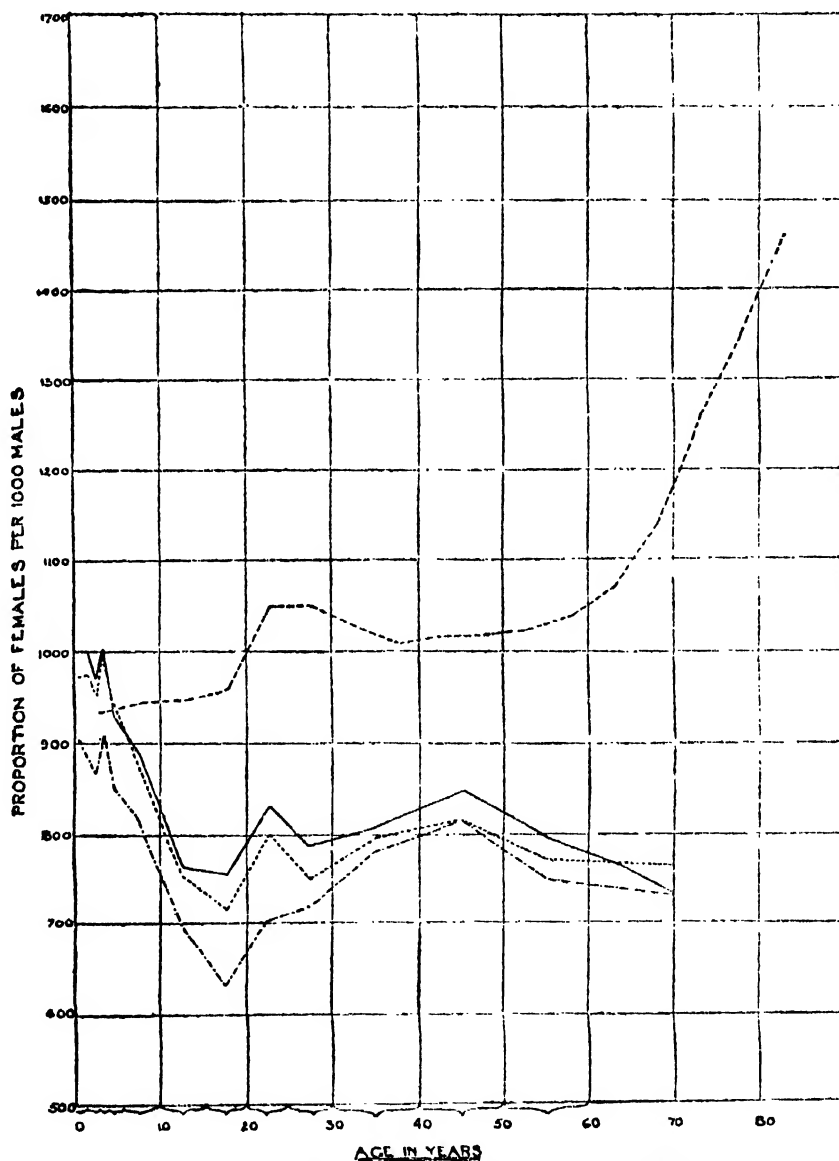
AGE IN YEARS
THE CURLY BRACKETS INDICATE THE AGE GROUPS AT THE
CENTRE OF WHICH THE FREQUENCY IS CONCENTRATED

These give the number of females per 1,000 males for all religions, and for Hindus, Musalmans, Sikhs and Christians separately for the 3 censuses, 1901, 1911 and 1921, and display that remarkable similarity of feature which has been already referred to. In comparing the figures for the different censuses for Hindus, Musalmans and Sikhs, the great deficiency in the number of females in the marriageable ages from 10 to 20 is most striking. The deficiency was greatest in 1911 when the curve dropped far below its 1901 position. In 1921 the curves had moved part of the way towards their position in 1901, but are still somewhat below it. For Christians the greatest defect is in the number of females between the ages of 20—30, a fact which must be attributed to the later age of marriage among Christians as compared with the people of other religions. For Christians, however, the fewest number of females of marriageable age was found in 1901, and the number has risen steadily since then up to the present time. If the proselytisation of low caste Hindus, Musalmans and Sikhs continues it seems certain that the distribution curve for Christians will approximate more and more closely to the features of the curves of those religions. More particularly, this result is likely to be accelerated by the increasing tendency to defer the age of marriage among Punjabis of all non-Christian religious groups. This feature is well marked in the diagrams, there being a perceptible tendency for the minimum number of females per 1,000 males to leave the group 10—15 years for the group 15—20 years. In the case of Hindus, the minimum has actually shifted to the 15—20 group in 1921, probably for the first time in recent history, while for Sikhs the shift took place between 1901 and 1911. For Christians the reverse process is at work and the minimum has shifted backward from the age-group 35—30 years in 1901, to the age-group of 20—25 years in 1911: and there it still remains. It may be interesting to suppose, just for a moment, that the figures of the relative numbers of males and females for each age-group really correspond with the facts, and to attempt to explain the variations of the relative frequency of females to males for each age-group. More males are born than females, roughly in the proportion of 10 males to 9 females. Among Musalmans and Hindus a greater mortality appears to occur among boy children than among girl children during the first five years of life, and up to the age of 4 the proportion of females is well maintained if not actually increased. From the age of 5 to 15 years the drop in the proportion of females is very marked, and this may be due to the neglect of female children during the years preceding puberty. From the age of 15—25 years the female is in demand, and will have more attention paid to her, so that during those years the proportion of females rapidly increases. There is a drop in the curves for Musalmans and Hindus towards the ages of 25—30, and this may be attributed to the mortality arising from early child bearing. After the age of 30 the proportion of females rises to another maximum between the ages of 40 and 50 which corresponds to the close of the usual span of female fertility. Thereafter the curve drops away towards the high ages, women of over the age of 50, especially among the poorer classes, suffering considerably from neglect, if not from actual privation.

It is instructive to compare the figures with the corresponding figures for the proportion of females to males in England and Wales according to the Census of 1911. The results are exhibited in diagram 41 below :—

Diagram
41.

PROPORTION OF FEMALES PER 1000 MALES
ACCORDING TO AGE GROUPS
ENGLAND AND WALES CENSUS 1911 (P. 61. OF GENERAL REPORT)
PUNJAB INDO GANGETIC PLAIN CENSUS 1921 }
VIDE SUBSIDIARY TAB. III, CHAP. VI }
 MUSALMANS
 HINDUS
 SIKHS



THE CURLY BRACKETS INDICATE THE AGE GROUPS AT THE CENTRE OF WHICH THE FREQUENCY IS CONCENTRATED

The explanations offered for the variations in the curves for Musalmans, Hindus and Sikhs in the Punjab may apply to the peak in the English curve which occurs between the ages of 20 and 30, and to the slight subsequent drop between the ages of 30 and 40. That is to say, that at the marriageable ages of 20 to 30 females have much greater care and attention bestowed upon them than males of the corresponding ages, but that the mortality of child-bearing produces a

slight re-action after the age of about 27 years in favour of males. Most marked of all, however, is the fact that apart from this particular phenomenon associated with marriage, the proportion of females to males in England and Wales rises continuously from childhood to old age, indicative of the excessive care lavished on women in England *quâ* women, and not merely *quâ* child-bearers. Social reformers may well stand aghast at the neglect of, and the contempt for female life shown by all religious groups in the Punjab ; but no less extensive, and, possibly, fraught with serious consequences to the future of the race, is the excessive pampering of females in England, and its correlative the undue neglect of male life.*

*In discussing the matter with Colonel Forster, I.M.S., Director of Public Health, Punjab, he has made the following acute observations which bear on the great disproportion among females and males at the higher ages in England. During the past half century there has been a steady tendency for females to acquire property and sums of money in their own right. Now, whereas, a man has, through the force of traditional and social custom, a tendency to spend his money for the benefit of the woman, the woman has no traditional tendency to spend her money for the benefit of the man. The consequence is that, in enjoying the benefits of little comforts and luxuries, woman in England is steadily increasing her advantages over the man, and the effect of this process on the relative male and female mortality can hardly be negligible. In the Punjab the independent woman, *e.g.*, the orphan daughter or widow, has, under customary law, only the right of maintenance, and she may never alienate the ancestral property except for necessity, the onus of proving which is put upon her.

I. General proportion of the sexes by Natural Divisions, Districts and States. II. Number of females per 1,000 males at different age-periods by religions at each of the last three censuses, Punjab and Delhi. III. Number of females per 1,000 males at different age-periods by religions and natural divisions (Census of 1921), Punjab and Delhi. IV. Number of females per 1,000 males for certain selected cities, Punjab and Delhi. V. Actual Number of Births and Deaths reported for each sex during decades 1891—1900, 1901—1910 and 1911—1920 (for British Territory only). VI. Number of deaths of each sex at different ages. VII. Proportion of females per 1,000 males (By Tahsils), Census 1921.

SUBSIDIARY TABLE I.

General proportion of the sexes by Natural Divisions, Districts and States.

DISTRICT OR STATE AND NATURAL DIVISION.	NUMBER OF FEMALES TO 1,000 MALES.									
	1921.		1911.		1901.		1891.		1881.	
	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.	Natural Population.	Actual Population.	Natural Population.
1	2	3	4	5	6	7	8	9	10	11
PUNJAB AND DELHI ..	828	819	817	811	854	846	850	844	844	844
PUNJAB ..	828	819	..	..	..	..	..	..	..	..
INDO-GANGETIC PLAIN WEST (TOTAL) ..	802	795	795	787	842	829	839	825	838	828
INDO-GANGETIC PLAIN WEST (PUNJAB)	805	795	..	..	..	..	..	..	..	..
1. Hissar ..	875	855	836	840	870	860	870	860	843	935
2. Loharu State ..	882	1,154	863	909	866	925	829	852	824	838
3. Rohtak ..	850	811	859	816	803	858	884	844	809	832
4. Dujana State ..	908	810	904	787	937	897	921	863	870	773
5. Gurgaon ..	854	806	878	846	911	868	910	819	894	875
6. Patanki State ..	893	712	925	722	905	750	909	761	877	690
7. Karnal ..	827	814	827	814	841	814	843	825	852	826
8. Jullundur ..	807	767	783	743	847	802	841	810	830	819
9. Kapurthala State ..	816	768	785	746	851	860	834	823	822	767
10. Ludhiana ..	780	748	762	724	823	786	830	805	822	815
11. Malerkotla State ..	711	752	752	757	849	836	859	867	843	845
12. Ferozepore ..	801	820	782	791	827	815	826	833	822	829
13. Faridkot State ..	789	756	765	772	802	785	860	796	802	763
14. Patiala State ..	791	787	770	780	820	846	817	826	818	810
15. Jind State ..	816	819	812	825	839	838	825	862	825	865
16. Nabha State ..	792	780	780	786	802	818	815	809	804	791
17. Lahore ..	751	791	711	775	815	823	816	821	811	796
18. Amritsar ..	790	765	771	759	829	799	828	803	820	803
19. Gujranwala ..	788	794	782	781	840	834	821	842	849	834
20. Sheikhupura ..	783	793	..	..	..	..	..	..	..	..
HIMALAYAN ..	907	912	901	906	892	913	890	909	878	900
21. Nahan State ..	824	816	822	819	798	845	792	836	775	800
22. Simla ..	488	606	591	923	542	1,025	589	583	556	1,000
23. Simla Hill States ..	917	960	907	917	888	911	876	900	850	867
24. Bilaspur State ..	874	877	..	..	..	..	..	..	..	..
25. Kangra ..	946	919	921	897	925	915	922	913	919	921
26. Mandi State ..	914	958	933	942	915	936	933	950	945	920
27. Suket State ..	897	923	893	901	888	889	887	920	793	861
28. Chamhu State ..	911	916	924	927	923	924	921	927	917	930
SUB-HIMALAYAN ..	852	834	827	810	880	862	863	855	856	863
29. Ambala ..	776	773	750	755	807	814	821	826	814	853
30. Kalua State ..	761	695	786	704	817	738	824	748	835	630
31. Hoshiarpur ..	860	822	832	806	882	856	873	864	872	864
32. Gurdaspur ..	811	802	783	776	844	843	838	839	848	845
33. Sialkot ..	837	814	807	782	891	851	871	852	876	853
34. Gujrat ..	879	858	861	843	927	897	900	846	903	876
35. Jhelum ..	976	895	904	855	979	911	918	888	880	897
36. Rawalpindi ..	827	873	848	866	819	900	854	894	826	892
37. Attock ..	934	920	902	879	Not available.					
NORTH-WEST DRY AREA ..	827	841	825	847	838	855	847	855	835	843
38. Montgomery ..	815	849	828	818	862	850	853	851	831	832
39. Shahpur ..	836	826	824	869	919	890	912	903	901	892
40. Mianwali ..	885	890	898	877	895	Not available.				
41. Lyallpur ..	792	850	761	860	745	596	Not available.			
42. Jhang ..	868	860	816	889	852	870	849	844	826	826
43. Multan ..	824	846	832	816	829	851	819	850	813	846
44. Bahawalpur State ..	816	827	811	829	822	833	830	845	824	834
45. Muzaffargarh ..	842	839	817	812	842	848	842	854	835	842
46. Dera Ghazi Khan ..	819	809	831	832	835	838	817	837	811	828
DELHI ..	733	788	..	..	..	..	..	..	..	..
INDO-GANGETIC PLAIN WEST ..	733	788	..	..	..	..	..	..	..	..
1. Delhi ..	733	788	..	..	..	..	..	..	..	..

NOTE 1. District and divisional figures in column 9 include the emigrants to other provinces except N.-W. Frontier.

2. Figures for Punjab and Delhi in column 9 include emigrants from N.-W. Frontier to other provinces of India except Punjab.

**Number of females per 1,000 males at different age-periods by religions at each of the last three Censuses,
Punjab and Delhi.**

Age.	ALL RELIGIONS.			HINDU.			MUSALMAN.			CHRISTIAN.			JAIN.			SIKH.		
	1901.	1911.	1921.	1901.	1911.	1921.	1901.	1911.	1921.	1901.	1911.	1921.	1901.	1911.	1921.	1901.	1911.	1921.
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Under 1 ..	927	954	966	928	966	982	950	963	968	948	871	906	930	1,059	864	792	884	915
1 ..	945	959	977	938	975	993	978	969	989	865	1,074	969	893	898	1,031	764	867	804
2 ..	918	941	962	902	951	977	938	959	972	1,012	905	978	888	1,082	1,059	747	832	874
3 ..	948	952	986	956	977	1,013	966	956	984	986	987	932	941	973	1,103	785	858	916
4 ..	968	903	928	911	914	953	926	923	928	936	905	932	957	888	932	776	784	855
Total 0-4 inclusive ..	926	941	963	926	956	983	949	953	966	952	933	954	925	994	980	774	848	893
5-9 ..	861	851	874	873	864	892	869	859	874	803	860	868	876	896	919	741	769	821
10-14 ..	755	707	750	754	723	763	771	717	754	795	750	746	825	776	796	665	612	700
15-19 ..	787	729	763	768	727	762	829	768	704	838	753	726	814	791	863	674	506	651
20-24 ..	917	854	852	887	851	837	972	898	905	280	410	632	884	888	846	836	754	729
25-29 ..	892	826	815	859	820	792	934	850	856	254	514	732	832	796	810	873	782	732
Total 0-29 ..	853	822	843	844	826	846	882	844	861	540	605	703	861	858	874	751	729	764
30-39 ..	874	826	813	858	817	798	889	840	833	668	725	760	815	707	829	873	802	779
40-49 ..	805	834	826	842	825	806	887	847	847	700	799	707	810	840	821	865	812	807
50-59 ..	814	759	778	803	764	767	836	765	797	731	716	792	825	838	760	762	726	737
60 and over ..	840	772	742	873	814	770	833	755	732	762	687	665	1,000	958	835	749	734	715
Total 30 and over ..	855	807	796	846	809	789	870	814	810	695	738	757	838	837	814	825	777	764
TOTAL ALL AGES. { Actual Population ..	854	817	826	845	820	825	878	833	843	580	707	782	853	850	853	779	746	764
{ Natural Population ..	846	811	819	Not avail-able.	816	..	Not avail-able.	835	..	Not avail-able.	806	..	Not avail-able.	839	..	Not avail-able.	738	..

1921.

Age.	ALL RELIGIONS.		HINDU.		MUSALMAN.		CHRISTIAN.		JAIN.		SIKH.	
	Punjab.	Delhi.	Punjab.	Delhi.	Punjab.	Delhi.	Punjab.	Delhi.	Punjab.	Delhi.	Punjab.	Delhi.
I	2	3	4	5	6	7	8	9	10	11	12	13
Under 1 ..	966	973	982	983	968	947	963	1,080	875	765	915	972
1 ..	977	1,019	994	970	987	1,104	974	794	1,048	852	894	786
2 ..	961	1,032	977	990	971	1,146	986	910	1,051	1,064	874	846
3 ..	985	1,032	1,011	1,069	985	952	930	980	1,104	1,088	915	2,187
4 ..	928	944	954	916	928	994	929	1,045	896	1,339	855	662
Total 0-4 inclusive ..	962	994	982	986	965	1,014	954	985	977	1,011	893	976
5-9 ..	874	904	892	893	874	919	864	1,035	911	1,000	821	844
10-14 ..	751	692	765	680	755	714	742	886	821	531	700	530
15-19 ..	764	696	764	709	796	656	722	823	861	868	652	425
20-24 ..	857	701	843	736	909	700	601	351	846	861	730	311
25-29 ..	819	641	800	643	859	651	742	579	813	784	733	290
Total 0-29 ..	844	773	849	776	862	782	708	678	875	838	764	465
30-39 ..	817	639	806	628	835	672	765	657	835	756	779	264
40-49 ..	830	649	812	654	850	643	802	678	837	704	807	330
50-59 ..	779	701	768	725	799	649	792	791	761	690	738	338
60 and over ..	742	740	770	774	732	670	663	779	844	769	715	437
Total 30 and over ..	799	665	794	669	812	659	760	690	821	727	765	301
TOTAL ALL AGES. { Actual Population ..	828	733	829	737	844	736	786	682	861	794	765	406
{ Natural Population ..	819	788	..	..	..	..	..	..	..	..	..	..

SUBSIDIARY TABLE III.

Number of females per 1,000 males at different age-periods by religious and natural divisions
(Census of 1921)—PUNJAB.

Age.	INDO-GANGETIC PLAIN WEST.						HIMALAYAN.					
	All Religions.	Hindu.	Musalman.	Christian.	Jain.	Sikh.	All Religions.	Hindu.	Musalman.	Christian.	Jain.	Sikh.
1	2	3	4	5	6	7	8	9	10	11	12	13
Under 1 ..	900	974	971	954	891	909	1,009	1,010	1,002	773	1,006	928
1 ..	975	989	1,005	955	1,033	886	1,011	1,012	955	1,864	500	1,182
2 ..	946	951	974	937	1,116	865	1,071	1,077	950	771	3,066	1,160
3 ..	988	1,000	1,011	913	1,108	910	1,055	1,056	1,032	1,087	3,000	1,031
4 ..	922	943	933	905	965	849	1,039	1,035	1,071	1,750	560	1,304
Total 0—4 inclusive ..	957	971	976	933	1,007	886	1,038	1,039	1,006	1,086	1,143	1,008
5—9 ..	868	876	889	849	916	809	963	964	928	1,418	1,778	951
10—14 ..	742	750	760	697	814	693	828	828	813	1,668	624	690
15—19 ..	709	709	753	740	885	625	955	963	793	1,579	833	699
20—24 ..	789	797	828	735	818	699	1,021	1,042	743	839	400	690
25—29 ..	757	749	787	783	809	712	972	995	638	893	560	615
Total 0—29 ..	815	821	843	802	886	747	958	965	826	1,237	705	786
30—39 ..	795	792	804	825	872	779	871	887	614	895	690	542
40—49 ..	820	805	843	801	874	809	849	857	631	834	214	587
50—59 ..	772	767	794	772	776	715	778	784	619	1,097	789	516
60 and over ..	738	758	729	679	865	725	803	787	523	1,375	632	613
Total 30 and over ..	787	785	798	783	853	769	834	840	601	941	558	550
TOTAL { Actual Population	805	808	827	796	874	755	907	913	737	1,111	641	694
ALL AGES. { Natural Population	795	..	..	..	..	..	912	..	..	..	..	..

Age.	SUB-HIMALAYAN.						NORTH WEST DRY AREA.					
	All Religions.	Hindu.	Musalman.	Christian.	Jain.	Sikh.	All Religions.	Hindu.	Musalman.	Christian.	Jain.	Sikh.
1	14	15	16	17	18	19	20	21	22	23	24	25
Under 1 ..	971	974	977	927	737	933	964	1,001	959	1,041	2,000	927
1 ..	977	980	988	957	1,286	906	972	1,013	969	1,008	400	915
2 ..	962	948	979	1,026	779	879	963	989	962	1,006	1,833	908
3 ..	989	1,002	991	971	1,071	938	960	1,017	956	901	714	907
4 ..	927	923	937	931	672	868	916	942	915	950	385	865
Total 0—4 inclusive ..	964	965	973	957	837	908	953	991	950	983	974	900
5—9 ..	880	883	883	881	889	844	858	884	855	846	761	854
10—14 ..	767	766	775	772	889	717	734	747	733	744	875	717
15—19 ..	808	766	845	681	805	735	784	720	805	702	425	698
20—24 ..	898	827	979	488	803	793	918	812	947	882	697	849
25—29 ..	875	799	933	727	834	785	851	747	880	672	1,000	793
Total 0—29 ..	867	842	892	768	861	803	851	829	859	823	776	810
30—39 ..	855	793	898	740	729	793	806	745	822	677	538	706
40—49 ..	867	813	901	820	726	828	808	758	822	757	690	763
50—59 ..	814	770	848	818	744	745	758	735	768	769	692	671
60 and over ..	750	782	762	657	783	697	717	763	714	623	714	686
Total 30 and over ..	828	792	860	758	739	771	782	750	792	702	628	732
TOTAL { Actual Population	853	823	880	765	815	791	827	801	835	786	723	784
ALL AGES. { Natural Population	834	..	..	..	..	..	841	..	..	..	..	..

SUBSIDIARY TABLE III.

Number of females per 1,000 males at different age-periods by religions and natural divisions (Census of 1921).

DELHI.

Age.				INDO-GANGETIC PLAIN WEST.					
				All Religions.	Hindu.	Musalman.	Christian.	Jain.	Sikh.
1				2	3	4	5	6	7
Under 1	..	..	..	973	983	947	1,089	765	972
1	..	..	..	1,019	970	1,194	794	852	786
2	..	..	..	1,032	990	1,146	910	1,064	846
3	..	..	..	1,032	1,060	952	980	1,088	2,187
4	..	..	..	944	916	944	1,045	1,339	562
Total 0—4 inclusive	..	..	..	994	986	1,014	985	1,011	976
5—9	..	..	..	904	893	910	1,035	1,000	844
10—14	..	..	..	692	680	714	886	531	530
15—19	..	..	..	606	709	650	823	868	425
20—24	..	..	..	701	736	700	351	851	311
25—29	..	..	..	641	643	651	570	784	290
Total 0—29	..	..	..	773	776	782	678	838	465
30—39	..	..	..	639	628	672	657	756	264
40—49	..	..	..	640	654	643	678	704	330
50—59	..	..	..	701	725	649	791	690	338
60 and over	..	..	..	740	774	670	779	759	437
Total 30 and over	..	..	..	665	669	659	690	727	301
TOTAL ALL AGES.	{ Actual Population			733	737	736	682	794	406
	{ Natural Population			788	..	..	..	..	..

SUBSIDIARY TABLE IV—PUNJAB.

Number of females per 1,000 males for certain selected castes.

CASTES.	NUMBER OF FEMALES PER 1,000 MALES.						
	All ages.	0-4 (inclusive).	5-11 (inclusive).	12-14 (inclusive).	15-19 (inclusive).	20-39 (inclusive).	40 and over.
HINDU.	2	3	4	5	6	7	8
1. Arora	856	1,001	890	722	797	845	835
2. Aggarwal	834	949	897	746	745	797	836
3. Ahir	794	991	842	619	693	774	773
4. Brahman	821	977	907	703	742	791	798
5. Bawaria	875	967	868	693	845	983	755
6. Chamar	845	976	879	711	695	862	823
7. Churah	834	979	873	697	709	868	761
8. Chhimba	780	908	887	718	795	797	657
9. Dagi or Koli	946	1,043	926	856	614	1,034	1,024
10. Dhanak	886	1,005	885	863	881	921	760
11. Gujjar	778	992	753	708	699	783	785
12. Girth	955	1,145	899	861	1,022	1,051	795
13. Jat	789	922	829	720	699	774	759
14. Jhinwar	808	937	881	738	734	787	755
15. Julah	857	1,014	993	818	881	825	729
16. Khatri	811	1,041	871	727	693	730	844
17. Kanet	936	1,038	953	798	918	972	890
18. Kumhar	859	1,023	934	771	810	823	796
19. Lohar	838	969	884	726	850	837	758
20. Mali	812	1,013	861	762	756	786	731
21. Nai	892	915	867	692	757	777	774
22. Rajput	796	938	840	723	766	768	779
23. Sunar	824	967	828	750	780	816	794
24. Saini	865	1,120	930	703	674	863	842
25. Sansi	720	823	741	691	888	683	641
26. Tarkhan	817	985	867	701	759	792	760
SIKH.							
1. Arora	836	856	829	725	851	885	781
2. Chamar	819	931	888	699	720	827	760
3. Churah	815	960	863	779	666	819	743
4. Chhimba	813	975	878	749	791	792	740
5. Jat	726	802	757	638	592	703	743
6. Jhinwar	848	969	906	678	749	836	833
7. Kamboh	854	956	1,009	849	739	818	783
8. Khatri	917	966	912	825	936	970	866
9. Mahtam	894	1,016	927	830	811	948	744
10. Nai	769	908	841	718	625	721	775
11. Saini	826	931	826	618	612	990	938
12. Tarkhan	795	897	832	721	737	804	752
MUSALMAN.							
1. Arain	830	918	860	817	755	830	785
2. Awan	997	962	864	680	922	977	914
3. Biloch	835	929	805	702	751	902	795
4. Bharai	835	908	855	685	772	856	801
5. Barwala	818	1,032	859	829	711	832	798
6. Chhimba	853	988	874	715	801	846	810
7. Dhobi	868	923	891	851	816	892	806
8. Dogar	813	991	860	735	680	790	785
9. Faqir	819	1,020	865	704	803	802	738
10. Gujjar	838	941	885	753	793	849	778
11. Harni	725	1,025	680	617	551	798	617
12. Jat	820	912	815	713	788	849	768
13. Julah	845	961	881	770	799	859	771
14. Jhinwar	831	937	889	691	740	853	782
15. Kumhar	819	911	908	691	774	865	824
16. Kashmiri	871	912	805	702	795	865	905
17. Khoja	975	1,066	992	912	925	1,041	858
18. Kamboh	885	960	901	938	790	998	714
19. Khokhar	829	1,005	823	650	862	857	753
20. Lohar	853	950	835	771	783	892	815
21. Mochi	854	996	936	673	785	844	806
22. Musalli	859	981	891	798	823	883	745
23. Machhi	854	964	908	708	679	908	796
24. Mirasi	865	950	875	739	807	882	819
25. Meo	844	958	816	747	731	864	873
26. Mughal	889	994	869	832	932	925	856
27. Mallar	923	872	880	743	826	1,068	912
28. Mallah	812	816	877	717	862	922	736
29. Nai	850	1,017	847	758	800	852	801
30. Pathan	827	960	896	767	771	786	799
31. Pakhiwara	832	1,146	895	636	919	846	730
32. Qasab	964	1,039	865	913	837	919	859
33. Qureshi	884	935	844	803	898	933	851
34. Rajput	864	957	889	781	790	870	839
35. Sheikh	780	1,001	925	682	704	730	702
36. Sayad	875	964	887	764	855	897	838
37. Sunar	887	733	1,822	694	692	974	766
38. Tarkhan	835	947	830	697	799	870	782
39. Teli	841	955	850	720	737	850	832

SUBSIDIARY TABLE IV—DELHI.

Number of females per 1,000 males for certain selected castes.

CASTE.	NUMBER OF FEMALES PER 1,000 MALES.						
	All ages.	0—4 (inclusive).	5—11 (inclusive).	12—14 (inclusive).	15—19 (inclusive).	20—39 (inclusive).	40 and over.
I HINDU.	2	3	4	5	6	7	8
1. Aggarwal	732	875	819	572	851	679	705
2. Ahir	710	651	1,073	650	594	644	731
3. Brahman	666	928	866	522	685	514	767
4. Chamar	745	998	897	610	750	713	589
5. Churah	767	1,063	801	519	778	755	677
6. Dagi or Koli	646	1,000	1,058	508	618	540	573
7. Dhanak	562	790	764	355	405	545	544
8. Dhobi	760	968	793	614	568	758	848
9. Gujjar	737	968	476	1,117	697	755	707
10. Jat	803	1,124	830	670	590	749	861
11. Jhinwar	598	923	581	475	566	458	966
12. Julah	776	1,008	859	1,113	611	752	651
13. Kumhar	787	1,086	1,043	671	698	649	793
14. Khatri	741	1,243	1,060	589	797	594	715
15. Lohar	675	842	887	471	509	579	761
16. Mali	745	930	916	711	688	722	651
17. Nai	820	921	905	650	815	771	876
18. Rajput	584	981	727	507	656	492	513
19. Saini	922	1,232	965	714	897	895	816
20. Sonar	790	1,217	853	769	770	712	733
21. Sansi	714	444	864	3,667	800	712	487
22. Tarkhan	585	1,132	762	308	534	504	590
JAIN.							
1. Aggarwal	768	953	977	378	827	791	681
MUSALMAN.							
1. Arain	838	1,141	736	807	850	691	1,004
2. Dhobi	839	1,072	1,052	614	645	916	579
3. Faqir	921	1,172	969	761	216	1,044	929
4. Mughal	800	1,355	813	810	857	542	853
5. Meo	774	922	856	596	876	734	701
6. Machhi	468	667	943	74	455	596	395
7. Pathan	651	878	721	520	806	645	533
8. Qureshi	850	884	1,394	1,041	1,228	627	676
9. Rajput	604	1,196	832	351	828	499	461
10. Sheikh	752	1,009	1,047	688	582	706	642
11. Sayad	702	804	859	678	815	535	763
12. Teli	845	1,262	1,049	984	656	745	661

SUBSIDIARY TABLE V.

Actual number of Births and Deaths reported for each sex during decades 1891—1900, 1901—1910, and 1911—1920. (For British Territory only).

YEAR.	NUMBER OF BIRTHS.			NUMBER OF DEATHS.			Difference between columns 2 and 3 excess of latter over former + defect. —	Difference between columns 5 and 6 excess of latter over former and defect.	Difference between columns 4 and 7 excess of latter over former and defect.	Number of female births per 1,000 male births.	Number of female deaths per 1,000 male births.
	Males.	Females.	Total.	Males.	Females.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12
PUNJAB AND DELHI (1891—1900)	4,048,998	3,668,763	7,717,761	3,342,579	3,067,397	6,409,976	-380,235	-275,182	+1,307,785	906	918
1891 ..	341,158	301,911	643,069	289,770	251,414	541,184	-39,247	-38,356	+101,885	885	868
1892 ..	380,072	338,240	718,912	475,422	432,814	908,236	-42,432	-42,608	+189,324	889	910
1893 ..	350,215	314,068	664,283	280,423	247,095	527,518	-36,147	-33,328	+130,765	897	881
1894 ..	433,731	391,359	825,090	363,881	332,545	696,426	-12,372	-31,336	+128,664	902	914
1895 ..	428,727	391,148	819,875	289,446	258,868	548,314	-37,578	-50,578	+271,561	912	894
1896 ..	420,759	385,258	806,017	305,698	276,591	582,289	-35,501	-29,107	+223,728	910	905
1897 ..	415,410	379,559	794,969	289,543	275,733	565,276	-35,851	-13,810	+229,603	914	952
1898 ..	403,231	367,488	770,719	296,188	278,620	574,808	-35,743	-17,568	+195,911	911	941
1899 ..	474,937	435,672	910,609	284,385	266,602	550,987	-39,265	-17,783	+359,622	917	937
1900 ..	400,168	364,060	764,218	467,823	447,115	914,938	-36,098	-20,708	+160,720	910	956
PUNJAB & DELHI (1901—1910)	4,340,338	3,945,923	8,286,261	4,459,990	4,383,718	8,843,708	-394,415	-76,272	-557,447	909	983
1901 ..	373,466	339,067	712,533	372,350	354,261	726,611	-34,391	-18,089	+14,078	908	951
1902 ..	461,952	418,525	880,477	443,473	443,500	886,973	-43,427	+27	+6,406	906	1,000
1903 ..	452,622	410,240	862,862	486,802	498,674	985,476	-42,382	+11,872	-122,614	906	1,024
1904 ..	436,678	397,371	834,049	480,250	506,298	986,458	-39,307	+25,958	-152,409	910	1,064
1905 ..	467,536	425,824	893,360	475,973	480,135	956,108	-41,712	+4,162	-62,748	911	1,009
1906 ..	459,329	418,677	878,006	374,880	368,026	742,906	-40,652	-6,854	+135,100	911	982
1907 ..	430,253	389,318	819,571	637,357	611,372	1,248,729	-40,935	-25,985	+429,158	905	950
1908 ..	439,539	400,522	840,061	517,219	502,906	1,020,125	-39,017	-14,313	+180,064	911	972
1909 ..	369,694	336,216	705,910	326,613	294,470	621,083	-33,478	-32,143	+84,827	909	902
1910 ..	449,269	410,163	859,432	345,073	324,166	669,239	-39,106	-20,907	+100,193	913	939
PUNJAB (1911—1920)	4,445,642	4,027,464	8,473,106	3,662,207	3,398,978	7,061,185	-418,178	-263,229	+1,411,921	906	928
1911 ..	443,322	405,004	848,326	334,246	315,014	649,260	-38,318	-19,232	+199,066	914	942
1912 ..	458,052	418,073	876,125	269,678	245,358	515,036	-39,971	-24,320	+301,089	913	910
1913 ..	459,417	418,824	878,241	304,326	279,458	583,784	-40,593	-24,868	+294,457	912	918
1914 ..	468,243	426,763	895,006	318,325	299,748	618,073	-41,486	-18,577	+276,933	911	941
1915 ..	440,955	402,057	843,012	359,821	342,729	702,550	-38,898	-17,092	+140,462	912	952
1916 ..	461,640	420,066	881,706	309,973	283,997	593,970	-41,534	-20,276	+287,876	910	916
1917 ..	459,273	417,460	876,733	378,785	354,324	733,109	-41,813	-21,461	+143,624	909	935
1918 ..	404,565	360,903	765,468	797,343	768,217	1,565,560	-43,662	-29,126	+800,092	892	963
1919 ..	413,018	365,828	778,846	291,266	266,804	558,070	-47,190	-34,462	+230,776	886	882
1920 ..	437,257	392,546	829,803	298,444	253,629	552,073	-44,711	-44,815	+277,730	898	850
INDO-GANGETIC PLAIN WEST.	1,999,811	1,825,279	3,825,090	1,669,441	1,558,941	3,228,382	-174,532	-110,500	+596,708	913	934
HIMALAYAN	148,438	138,766	287,204	136,714	130,608	267,322	-9,872	-6,106	+19,882	935	955
SUB-HIMALAYAN	1,241,903	1,138,364	2,375,267	1,060,280	988,527	2,048,807	-108,539	-71,753	+326,460	913	932
NORTH-WEST DEW AREA.	1,055,490	930,055	1,985,545	795,772	720,902	1,516,674	-125,435	-74,870	+468,871	881	906
DELHI (1911—1920)	161,000	94,390	195,390	91,859	90,709	182,568	-6,610	-1,150	+12,822	935	987
1911 ..	8,956	8,332	17,287	11,653	11,006	22,659	-623	-647	+6,372	930	944
1912 ..	10,100	9,438	19,538	9,186	9,068	18,254	-662	-118	+1,284	934	987
1913 ..	9,180	8,681	17,861	8,174	7,703	15,877	-490	-471	+1,984	916	942
1914 ..	9,880	9,507	19,387	7,601	7,418	15,079	-373	-243	+4,308	962	968
1915 ..	10,245	9,724	19,969	6,239	5,832	12,071	-621	-407	+7,898	949	935
1916 ..	10,648	9,931	20,579	6,951	6,766	13,717	-717	-185	+6,862	933	973
1917 ..	11,393	10,589	21,982	6,860	6,760	13,620	-804	-100	+8,362	929	986
1918 ..	10,420	9,548	19,968	18,029	20,354	38,383	-872	+1,725	+19,015	916	1,092
1919 ..	9,993	9,093	19,086	8,857	8,644	17,501	-900	-213	+1,585	910	975
1920 ..	10,186	9,547	19,733	7,649	7,158	14,807	-639	-491	+4,926	937	938

SUBSIDIARY TABLE VI.

Number of Deaths of each sex at different ages.

SUBSIDIARY TABLE VI.															
Number of Deaths of each sex at different ages.															
Age	1913.		1914.		1915.		1916.		1917.		1918.		Total.		Average number of deaths per 1,000 male
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PUNJAB	304,326	279,458	318,325	299,748	359,821	342,729	309,973	283,697	378,785	354,324	797,343	768,217	24,68,573	23,28,178	943
Under 1	99,976	90,320	97,853	90,208	82,908	76,036	93,136	83,360	113,633	103,782	105,668	95,416	503,144	530,338	909
1—4 (inclusive)	60,810	59,799	59,722	59,137	48,357	47,329	62,564	67,616	85,270	86,370	93,490	89,477	417,222	409,728	982
5—9 (inclusive)	16,071	15,287	16,875	17,166	24,132	26,525	17,316	16,191	22,963	22,318	55,032	54,910	132,320	132,397	1,000
10—14 (inclusive)	10,320	9,725	11,913	12,473	21,350	23,581	9,454	9,100	11,688	11,486	50,133	51,028	114,838	117,397	1,022
15—19 (inclusive)	8,182	7,559	9,800	9,866	17,463	17,218	7,935	7,990	9,419	9,562	53,483	53,476	106,309	105,765	995
20—29 (inclusive)	17,619	19,080	19,866	21,538	30,294	30,886	15,241	17,536	17,786	20,915	109,435	114,940	210,271	224,865	1,066
30—39 (inclusive)	16,150	16,916	19,028	19,912	29,537	29,968	15,744	16,439	18,635	20,085	91,873	95,268	190,967	188,528	1,040
40—49 (inclusive)	16,946	13,815	19,542	16,801	28,177	25,914	16,914	14,223	20,517	17,797	75,761	70,734	178,157	159,284	894
50—59 (inclusive)	16,890	12,760	18,989	15,237	25,914	22,249	18,164	13,976	22,503	17,213	66,650	58,908	169,100	140,344	830
60 and over	41,333	33,591	44,737	37,408	51,692	43,111	46,505	37,516	56,131	44,794	95,818	84,072	336,216	280,492	834
DELHI	8,174	7,703	7,661	7,419	6,239	5,832	6,951	6,766	6,860	6,760	18,629	20,354	54,514	54,833	1,006
Under 1	2,603	2,277	2,885	2,679	2,346	2,065	2,419	2,173	2,607	2,336	3,410	2,940	16,270	14,476	889
1—4 (inclusive)	1,228	1,249	1,036	1,054	820	843	1,437	1,502	1,271	1,415	3,241	2,918	9,033	8,961	994
5—9 (inclusive)	343	314	266	232	177	173	241	265	289	259	1,379	1,279	2,698	2,522	935
10—14 (inclusive)	235	269	193	181	112	165	148	162	134	190	1,031	1,141	1,853	2,108	1,136
15—19 (inclusive)	249	300	189	285	143	246	174	222	140	239	1,386	2,032	2,281	3,324	1,457
20—29 (inclusive)	616	743	529	753	403	557	414	551	371	582	2,597	3,673	4,980	6,841	1,388
30—39 (inclusive)	657	631	549	512	405	379	367	402	362	419	1,721	2,196	4,061	4,539	1,118
40—49 (inclusive)	638	546	544	452	478	405	463	350	899	329	1,364	1,404	3,886	3,486	897
50—59 (inclusive)	596	448	504	403	456	321	418	353	410	283	1,237	1,283	3,621	3,100	866
60 and over	1,009	926	966	866	899	678	867	786	877	718	1,263	1,458	5,881	5,462	929

SUBSIDIARY TABLE VII.

Proportion of females per 1,000 males (by Tahsils) Census 1921.

PROPORTION OF FEMALES PER 1,000 MALES.				PROPORTION OF FEMALES PER 1,000 MALES.				PROPORTION OF FEMALES PER 1,000 MALES.			
District.	Number.	Name.	Proportion.	District.	Number.	Name.	Proportion.	District.	Number.	Name.	Proportion.
1	2	3	4	1	2	3	4	1	2	3	4
HISSAR.	1	Hissar ..	859	LAHORE.	49	Lahore ..	664	MONTGOMERY.	90	Montgomery ..	767
	2	Hansi ..	878		50	Chunian ..	833		91	Okara ..	800
	3	Bhiwani ..	887		51	Kasur ..	828		92	Dipalpur ..	847
	4	Fatehabad ..	891						93	Pakpattan ..	862
	5	Sirsa ..	861								
ROHTAK.	6	Rohtak ..	829	AMRITSAR.	52	Amritsar ..	761	LYALLPUR.	94	Lyallpur ..	774
	7	Jhajjar ..	867		53	Tarn Taran ..	809		95	Samundri ..	818
	8	Gohana ..	852		54	Ajvala ..	834		96	Toba Tek Singh ..	789
	9	Sonepat ..	854						97	Jaranwala ..	801
GURGAON.	10	Gurgaon ..	860	GURDASPUR.	55	Gurdaspur ..	790	JHANG.	98	Jhang ..	874
	11	Ferozepur-Jhirka ..	867		56	Batala ..	813		99	Chiniot ..	863
	12	Nuh ..	853		57	Pathankot ..	749		100	Shorkot ..	882
	13	Palwal ..	836		58	Shakargarh ..	875				
	14	Rewari ..	863								
KARNAL.	15	Ballabgarh ..	847	SIALKOT.	59	Sialkot ..	822	MULTAN.	101	Multan ..	805
	16	Karnal ..	835		60	Pasrur ..	859		102	Shujabad ..	849
	17	Panipat ..	832		61	Zafarwal ..	866		103	Lodhran ..	850
	18	Kaithal ..	825		62	Raya ..	837		104	Mailsi ..	825
	19	Thanesar ..	812		63	Daska ..	817		105	Khanewal ..	763
AMBALA.	20	Ambala ..	751	GUJRANWALA.	64	Gujranwala ..	770	MUZAFFARGARH.	106	Kabirwala ..	866
	21	Kharar ..	753		65	Wazirabad ..	800				
	22	Jagadhri ..	784		66	Ratizabad ..	801		107	Muzaffargarh ..	841
	23	Naraingarh ..	816						108	Alipur ..	836
	24	Rupar ..	783		67	Khangah Dogran ..	781		109	Sinawan ..	829
SIMLA.	25	Simla ..	388	SHEIKHPURA.	68	Sharakpur ..	785	MUZAFFARGARH.	110	Leiah ..	862
	26	Kot Khai ..	971								
KANGRA.	27	Kangra ..	919	GUJRAT.	69	Gujrat ..	904	D. G. KHAN.	111	D. G. Khan ..	826
	28	Dehra ..	942		70	Kharian ..	961		112	Sangar ..	890
	29	Nurpur ..	788		71	Phalia ..	788		113	Rajampur ..	772
	30	Hamirpur ..	997						114	Jampur ..	813
	31	Palampur ..	974							Bloch Trans-Frontier ..	767
HOSHIAUR.	32	Kulu ..	1,015	SHAH-PUR.	72	Shahpur ..	874	DELHI.			
	33	Hoshiarpur ..	845		73	Khushab ..	974				
	34	Dasuya ..	839		74	Bhalwal ..	799				
	35	Garbhankar ..	830		75	Sargodha ..	745				
	36	Una ..	929								
JULLUNDUR.	37	Jullundur ..	804	JHELM.	76	Jhelum ..	939	STATES.			
	38	Nakodar ..	828		77	Pind Dadan Khan ..	976				
	39	Phillaur ..	784		78	Chakwal ..	1,018				
	40	Nawashahr ..	812								
LUDHIANA.	41	Ludhiana ..	772	RAWALPINDI.	79	Rawalpindi ..	678	DELHI.	1	Delli ..	733
	42	Jagraon ..	830		80	Gujar Khan ..	974				
	43	Samrala ..	732		81	Murreo ..	929				
					82	Kahuta ..	1,013				
PEROZEPOR.	44	Ferozepore ..	768	ATTOCK.	83	Attock ..	875	STATES.	1	Nabha ..	792
	45	Zira ..	829		84	Pindigheb ..	984		2	Patiala ..	791
	46	Moga ..	792		85	Talagang ..	1,012		3	Loharu ..	882
	47	Muktsar ..	805		86	Fateh Jang ..	902		4	Faridkot ..	789
	48	Fazilka ..	814						5	Kapurthala ..	816
MIANWALI.				WALL.	87	Mianwali ..	894	STATES.	6	Mandi ..	944
					88	Bhakkar ..	867		7	Suket ..	897
					89	Isakhel ..	906		8	Chamba ..	911
									9	Bahawalpur ..	816
									10	Jind ..	816

CHAPTER VII.

Civil Condition.

SECTION I.—GENERAL.

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SECTION III.—COUSIN MARRIAGE.

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Section I.—General.

128. The instruction to enumerators for filling up the schedule in respect of column 6 —“married,” “unmarried” or “widowed,” was as follows:—

“Enter each person whether infant, child or grown-up as married, unmarried or widowed; divorced persons should be entered as widowed.”

Instruction
to Enumera-
tors.

Further the supplementary instruction to supervisors printed as Appendix I to the Code of Census Procedure, 1921, stated—

“Column 6.—A woman who has never been married must be shown in column 6 as unmarried, even though she may be a prostitute or concubine. Persons who are recognised by custom as married are to be entered as such, even though they had not gone through the full ceremony, *e.g.*, the widows who have taken a second husband by the rite known as *karewa* or *chaddar andazi*.”

The *karewa* or *chaddar andazi* marriage is, as is well known, a most shadowy affair, and in the Central Punjab forms one of the most frequent causes of criminal litigation, the death of a husband being commonly the signal for the widow to attempt to escape from her late husband's home, an attempt which is countered by the deceased husband's brothers bringing a complaint under section 498 of the Indian Penal Code. In such cases the brother who happens to be the complainant, will assert that a marriage by *karewa* or *chaddar andazi* has taken place, the performance of the ceremony being strenuously denied by the widow. The introduction of a voluntary system of marriage registration, which has been introduced into the several districts of the Punjab, has helped to give greater certainty as to whether such a marriage has taken place or not.

The figures regarding civil condition distribution according to age and sex are given in Imperial Table VII. This table is divided into three parts: Part A shows the distribution for the Punjab as a whole and for the Punjab States for both groups, and for Delhi, for each main religion by age, sex and civil condition. Part B gives the distribution for districts and States, and Part C gives similar details for cities and selected towns, in which the figures for Buddhists, Parsis and Jews are also included. Further information is contained in the subsidiary tables to this chapter.

Subsidiary Table I gives the distribution by civil condition of 1,000 of each sex, religion and main age-period for each of the last five censuses.

Subsidiary Table II gives the distribution by civil condition of 1,000 of each sex for various age-periods by religions and natural divisions.

Subsidiary Table III gives the distribution by age and civil condition of 10,000 persons of each sex and religion.

Subsidiary Table IV gives the proportions of the sexes for different religions by natural divisions, and for various age-periods.

Subsidiary Table V gives the distribution by civil condition for 1,000 of each sex for selected castes at various ages.

The remaining subsidiary tables embody the main statistics obtained from the Family Census.

Subsidiary Tables VI, VI-1, VI-2, VI-3, VI-4, VI-5 and VI-6 give the number of children born and alive for various durations of marriage, and for male and female children separately. The sex of the firstborn child is also given, and the age of the woman at marriage, together with the number of children born to women of various ages at marriage. Subsidiary Table VI gives the figures for all the caste-groups among whom the enquiry was made, while the other Tables VI-1, VI-2, VI-3, VI-4, VI-5 and VI-6 give the figures for each caste-group separately; Table VI-1 dealing with the clerics, VI-2 with agriculturists, VI-3 with traders, VI-4 with artisans, VI-5 with menials and VI-6 with criminals.

Subsidiary Table VII-A shows the gross fertility for males and females for each year of marriage up to 10, and thereafter by quinquennial periods up to 30, for each caste-group separately.

Subsidiary Table VII-B gives the same information for the nett fertility, that is, for the number of children actually alive at the time of the Family Census.

Subsidiary Tables VIII-A and VIII-B give the comparison of the observed fertilities (gross and nett) together with the graduated values determined by calculation.

Subsidiary Tables IX-A, IX-B, IX-C and IX-D give the results of a special enquiry into the frequency of cousin marriage among Musalmans in the Attock, Muzaffargarh and Gurdaspur districts, and the Delhi province, respectively.

129. The proportion of males who live anything like the allotted span of years and remain unmarried is very small, and the proportion of females even smaller. In the whole of the Punjab only 5·6 per cent. of the males over 60, and 0·7 per cent. of the females, have never been married. The percentage of unmarried men over 60 (which excludes widowers) is 2·9 per cent. for Christians, 3·8 per cent. for Musalmans, 7·1 per cent. for Hindus, 9·0 per cent. for Sikhs and 9·1 per cent. for Jains. Spinsters over 60 years of age form 0·3 per cent. of the age-groups for Sikhs, 0·4 per cent. for Hindus, 0·7 per cent. for Jains, 1·0 per cent. for Musalmans and 1·8 per cent. for Christians. The relative fewness of females among Sikhs is responsible for the relatively high proportion of unmarried men, and for the relatively low proportion of unmarried females among this religious group as compared with the corresponding proportions for other religious groups. During the last 40 years there has been a tendency for fewer males to remain unmarried among those of 60 and over. Details are given in the marginal table.

Practical
universality
of marriage.

Percentage of unmarried men over 60 (excluding widowers) for each of the last five censuses.

	1881.	1891.	1901.	1911.	1921.
Hindus	8·7	8·2	8·0	7·6	7·1
Musalmans	5·1	4·1	4·0	4·5	3·8
Christians	8·7	2·0	3·1	3·8	2·9
Sikhs	10·0	9·9	9·8	10·1	9·0

percentage of unmarried males has increased

On the other hand there seems to be a tendency during the last 40 years to postpone the age of marriage, as in the younger age-groups from 5 to 19 the proportion of unmarried males has increased somewhat since 1881. Taking, for example, the age-group of 15-19 years, the percentage of unmarried males has increased as follows:—

	From	To
Hindus	60·3 per cent.	64·9 per cent.
Musalmans	71·0 ..	77·6 ..
Sikhs	63·6 ..	73·1 ..

Only among Christians has the reverse tendency been observable, and the number of unmarried between 15 and 19 has fallen from 92·1 per cent. in 1881 to 70·3 per cent. in 1921. The reason for this drop among Christians is undoubtedly the fact that in 1881 the Christians enumerated were mainly Europeans, among whom there would of course be a large proportion of unmarried males between 15 and 19. The conversion of a number of Indians to Christianity during the last 40 years would, therefore, bring about a reduction in the proportion of unmarried males of the younger ages. The question of the age of the woman at marriage is discussed in detail in paragraph 134 of Section II of this Chapter.

At any given time, irrespective of age, rather more than half the males and about two-fifths of the females alive are unmarried. The figures for the British Territory, Punjab States and the Punjab and Delhi are given in the marginal table.

Civil condition.	1921.		Civil condition.	1921.	
	Males.	Females.		Males.	Females.
BRITISH TERRITORY (PUNJAB AND DELHI).			BRITISH TERRITORY (DELHI).		
Unmarried ..	538	408	Unmarried ..	438	346
Married ..	375	460	Married ..	404	521
Widowed ..	87	132	Widowed ..	98	133
PUNJAB STATES.			TOTAL PROVINCES (PUNJAB AND DELHI).		
Unmarried ..	518	372	Unmarried ..	535	402
Married ..	388	482	Married ..	373	464
Widowed ..	94	146	Widowed ..	88	134
BRITISH TERRITORY (PUNJAB).			PUNJAB PROVINCE.		
Unmarried ..	541	409	Unmarried ..	537	403
Married ..	373	459	Married ..	375	463
Widowed ..	86	132	Widowed ..	88	134

The earliness of marriage among Punjabis is well illustrated by the marginal

Age-periods.	MARRIED PERSONS per mille, 1921.							
	Male.				Females.			
	Hindus.	Musalmans.	Jains.	Sikhs.	Hindus.	Musalmans.	Jains.	Sikhs.
Under 5 ..	29	1	2	..	3	1	..	1
5-9 (inclusive) ..	23	8	6	6	68	25	16	24
10-14 ..	113	50	80	63	362	185	191	221
15-19 ..	330	213	388	258	848	680	816	780

table which shows the number of married males and females for each of the first four quinquennial age-groups. It will be observed that 33 per cent. of male Hindus and 85 per cent. of female Hindus are married before the age of 20, while among Musalmans the corresponding figures are 21 per cent. for males and 68 per cent. for females. These figures may be compared with those of 1881 when 38 per cent. of Hindu males and 88 per cent. of Hindu females were married before the age of 20, while 28 per cent. of Musalman males and 76 per cent. of Musalman females were married before the age of 20.

Widows.

130. One consequence of the very early age of marriage is that many women are left widowed before they reach the age of puberty. Thus in the Punjab at the Census of 1921 there were no less than 27 widows under the age of 5, there were 2,835 under the age of 10, 8,963 under the age of 15, and 26,400 widows under the age of 20. Taking the widows between the ages of 15 and 19 as typical, the Jains show the highest percentage of widows (3.2 per cent.),

Religions.	PROPORTION OF WIDOWS PER 1,000 IN THE AGES OF 0-39 (INCLUSIVE).							
	Punjab and Delhi.					Punjab.		Delhi.
	1921.	1911.	1901.	1891.	1881.	1921.	1921.	
Hindus ..	49	58	47	68	54	49	43	
Musalmans ..	29	32	30	72	31	29	27	
Jains ..	79	101	59	90	69	77	92	

Hindus come next with 3.0 per cent., Musalmans next with 2.9 per cent., Sikhs 1.7 per cent. and Christians 0.3 per cent. The proportion of widows below the age of 40 is shown for the last five censuses in the marginal table.

Widow re-marriage.

131. The evils which arise from early widowhood have been vigorously combated by various reformers. In the Punjab the most prominent body which has undertaken this branch of social reform is the Vidhva Vivah Sahaik Sabha of Lahore, under the Presidentship of Sir Ganga Ram, Rai Bahadur, C.I.E., M.V.O., which was inaugurated in 1914. The objects of this society, as given by the Honorary Secretary, are-

- (1) to encourage and arrange widow-marriages ;
- (2) to place proper literature in the hands of the public.

The society has brought about the following number of widow re-marriages :-

1914-15 ..	..	..	..	..	..	..	12
1916 ..	..	..	..	..	..	..	13
1917 ..	..	..	..	..	..	..	31
1918 ..	..	..	..	..	..	..	40
1919 ..	..	..	..	..	..	..	90
1920 ..	..	..	..	..	..	..	220
1921 ..	..	..	..	..	..	..	317
1922 ..	..	..	..	..	..	..	453

Thus the Sabha is steadily expanding, and is effectively bringing about a steady increase in the number of widow remarriages. From the list of marriages published for 1921 some very interesting information is available, namely, that out of 317 widow-marriages arranged by the society, no less than 47, *viz.*, 15 per cent. took place between parties of different castes; a fact which is in itself evidence of a tendency to loosen the bonds of marriage within the caste. One notable feature of these inter-caste widow-marriages is that the widow has, in nearly every instance, to marry below her own caste; thus a Brahman widow will marry an Arora or Aggarwal, a Rajput widow will marry a Khatri or a Sud, a Khatri widow will marry an Arora, but, of the 47 marriages between parties of different castes, I can only find one instance, that of an Arora widow who married a Khatri gentleman, where the widow gained in social status by remarriage. However this may be, it is clear that the aims of the Vidhya Vivah Sabaik Sabha are philanthropic, and that it is doing a valuable work for the community in saving young widows from degradation.

Section II.—Fertility Data and Allied Topics.

132. A special census, commencing in August 1920 and completed in July 1921, was carried out at the suggestion of the Census Commissioner for India, in order to obtain data for discussion of the problems of the effect of the duration of marriage on fertility, of the size of the family, of the age of the woman at marriage, of the effect of primogeniture on longevity, and the like. The enquiry was a voluntary one, and no pressure was brought to bear to obtain replies. It follows that the data do not necessarily form a random sample of all marriages of the type to which the enquiry was confined, namely, to families in which both parents were alive at the time of the census, and in which there was, or (presumably) had been only one wife. The data recorded were as follows:—

The Family
Census.

- (1) Name of the district or State.
- (2) Name of the informant.
- (3) Informant's caste.
- (4) Informant's age.
- (5) His wife's age.
- (6) Duration of marriage.
- (7) Number of children born alive—(a) male, (b) female, (c) total.
- (8) Number of children still alive—(a) male, (b) female, (c) total.
- (9) Sex of the first-born.

The figures obtained were sorted to show the numbers of children, male and female, born alive, or still living, number of childless marriages, the age of the woman at marriage, and the largeness of the family alive at the time of the census, classified according to the age of the woman at marriage, for marriages of five years' duration and over.

The data were further classified in six large groups each of which comprised a miscellany of castes, though there is a general homogeneity of occupation in each group. For example —

- (1) group 1 is comprised mainly of genealogists, priests, writers and merchants;
- (2) group 2 is almost wholly comprised of the agricultural castes;
- (3) group 3 is formed from the trading classes;
- (4) group 4 comprises artisans, carpenters, masons, goldsmiths and what not;
- (5) group 5 is formed from other manual workers and menials, such as oilmen, sweepers, washermen, butchers, potters, barbers and so forth;
- (6) group 6 is comprised of no less than 108 castes, some of whom have families of very high standing, such as the Ahluwalia, Qazilbash, Sheikh and Chishti, but of whom the majority belong to the tribes which lead a wandering, criminal and generally precarious existence, for example, the Bazigar, the Bawaria, the Pakhiwara, the Chirimar, the Sansi, the Kanjar, the Mullah, the Nat and the Harni, to mention only a few of the more noted castes.

The actual caste names which are included in each group are given in the following list :—

List showing the castes grouped together for the purposes of the Family Census enquiry.

Group 1.—Bhat (Bhatra), Bhat or Rai Brahman, Padha, Ukma, Kayaeth, Khatri.

Group 2.—Arain, Awan, Ahir, Pahti, Bishnoi, Biloch, Lodla, Pathan, Thakkar, Jat, Janjua, Chang, Dogar, Dhund, Rathi, Rajput, Rawat, Sansar, Sati, Sayed, Saini, Qureshi, Karal, Kamtoh, Kanet, Khokhar, Gaddi, Gakkhar, Gujjar, Chirath, Lilla, Lodha, Mali, Moghal, Maliar, Mahton, Meo.

Group 3.—Arora, Bania, Bohra, Bhabra, Bhatia, Khoja, Dhusar, Sud, Khakha, Mahajan.

Group 4.—Tarkhan, Tank or Toba, Raj, Ram Garhia, Sunar, Lohar, Mair.

Group 5.—Od, Batwal, Barar, Barwala, Baledi, Beldar, Bhil, Pasi, Teli, Julaha, Jhiwar, Chamar, Chanal, Chuhra, Chhimba, Dagi and Koli, Daoli, Dosali, Dhanak, Dhobi, Dhogri, Dumna, Rihar, Sarera, Ghulam, Qasab, Kumhar, Kanera, Kori, Gandhila, Lilari, Mussalli, Mocli, Mahtani, Mehra, Mirasi, Nai, Hadi.

Group 6.—Abdal, Arab, Arya, Agir, Ahluwalia, Aheri, Bazigar, Bagri, Bawaria, Baddun, Bukhara Bangali, Bhatia, Bland, Bharai, Bhatia, Bharbhunja, Bahruja, Bhanja, Bhojki, Bairagi, Patwa, Pachahdha, Paracha, Pakhiwara, Phiphra, Perna, Penja, Tajik, Tagah, Turk, Tamboli, Tanaoli, Thori, Thathiar, Jangida, Jogi, Jogi-Rawal, Jhoja, Jhabel, Chirimar, Chishti, Changar, Churigar, Khalsa, Khanzada, Khumra, Khushabi, Darugar, Daudpotra, Darzi, Dabgar, Rahbari, Rababi, Ror, Sansi, Sajela or Sapadha, Sirkiband, Storagar, Sheikh, Sikligar, Fuqir, Qazilbash, Qalandar, Kapri, Kathia, Kachhi, Kangar, Kurmi, Kashmiri, Kakkezai, Kalal, Kalwar, Kamangar, Kanjar, Kanchan, Kunjra, Kehal, Khatik, Gadi, Gara, Garri, Gagra, Gadaria, Gorkha, Gosain, Ghai, Ghosi, Kedari, Labana, Machhi, Mazhabi, Mujawir, Mallah, Maniar, Miana, Megh, Mina, Natak, Nat, Lungar, Niaria, Harni, Hali, Hijra, Hesi.

The number of families for which data were obtained was 166,419, the division according to caste-groups being as follows. For convenience I have given a general name to each group corresponding to its principal component occupation :—

Caste-group.					Number of families for which data were recorded.	Number of families with a duration of marriage of 5 years and over.
1.	Clerics	..	..	..	16,611	15,532
2.	Agriculturists	..	..	..	74,813	69,406
3.	Traders	..	..	..	11,879	10,918
4.	Artisans	..	..	..	7,649	7,086
5.	Menials	..	..	..	31,832	29,289
6.	Criminals	..	..	..	23,635	21,280
					166,419	153,511

As all the information is further classified separately for each Punjab district and State, as well as by the natural geographical divisions of Indo-Gangetic Plain West, Himalayan, Sub-Himalayan and North-West Dry Area, it is clear that, if the data are reliable, as they probably are to within the same limits of accuracy as the Census proper, they form a mass of extremely valuable material, to the examination of which one might appropriately devote months of labour, were it feasible to do so.

It is out of question even to print anything but the bare totals for the Punjab of the figures for each caste-group and for all caste-groups together. These are given in Subsidiary Tables VI, VI (1), VI (2), VI (3), VI (4), VI (5) and VI (6), the numbers in brackets referring to the caste-group number assigned in the list on this page. Only a few of the many interesting paths of enquiry, which invite seemingly to distant bournes can be pursued, and even these must be trodden warily, else we shall soon be lost in a forest of perplexity.

Sex of the first-born.

133. The following are the data showing the observed numbers, and the ratio of the numbers of female to male first-born children, according to duration of marriage for all caste-groups :—

Duration of marriage in years.	0—4.	5—9.	10—14.	15—19.	20—24.	25—29.	30 and over.
Number of female first-born	3,054	10,358	12,321	10,982	9,765	6,242	13,806
Number of male first-born	3,925	12,218	16,317	14,260	13,034	8,497	20,265
Ratio of numbers of female first-born to male first-born	0.778	0.848	0.755	0.770	0.749	0.735	0.681

On the whole, therefore, there is a tendency for there to be more female first-born in the case of marriages of duration between 5 and 10 years than for marriages which have lasted less than 5 or more than 10 years. The observed ratio for the first 10 years of duration of marriage is as follows for each year separately :—

Duration of marriage in years.*	0	1	2	3	4	5	6	7	8	9
Ratio of numbers of female to male first-born	0	0.785	0.755	0.757	0.807	0.849	0.825	0.866	0.852	0.840

Thus, while the first-born child is, according to these figures, always less likely to be a girl than a boy, it is more likely to be a girl for marriages which had lasted (in 1920-21) from 5 to 10 years than any other time, and the maximum likelihood of a female first-born is for those marriages which took place 7 years before the Family Census, that is in 1913-14.†

Now, in the first place, it is obvious that the duration of the marriage *after the birth of the first child* can have no possible effect on the sex of the first-born, and as the first-born children of parents who had been married, say, 15 years in 1920-21, may have been born in the 1st, 2nd, 3rd years of marriage, the ratio of the sexes of the first-born of parents, whose duration of marriage was 15 years, includes births which took place from the 1st to the 15th year of marriage.

What we really want to know is whether the sex-ratio of first-born children varies with the variation in the years elapsed from marriage to the date of birth of the first child, and on this problem the light obtained is only indirect. Thus, we know that marriages of long duration will include cases in which the first-born child was born after several years of marriage, while marriages of short duration cannot include such cases; but numerical precision cannot be reached as to the exact way in which the first-born sex-ratio varies with the interval between marriage and the birth of the first child. All that it is possible to say is that there is an indication that the first child when it is born in the early and late years of marriage is more likely to be a boy than in the middle (5-10) years of married life. Even this conclusion must be regarded as subject to error from the concealment of female births, to which the Punjab is prone. If this tendency (as there are reasons to think possible) is more marked for children born in the early and late years, when disappointment at bearing a girl-child may be most intense, then our figures may be of no use at all from a physiological stand-point.

Lastly, in this connection it will be necessary to examine the general ratio of female to male births, any variation in which, for example an increase in this ratio, during the last 30 years, would produce a smaller female to male ratio of first-born children for marriages of long duration (in 1921) than for marriages of short duration; and this would vitiate, *pro tanto*, the tentative result suggested above.

For this purpose we will compare the ratio of female to male first-born for each year of duration of marriage with the general ratio of female to male births. The question arises "which year should be adopted for a comparison?" Take for example marriages which have lasted 8 years; some of them will have had their first-born child in the first year of marriage, some in the second, and so

Showing percentage of childless marriages for the first 10 years of duration of married life.

Duration of marriage.	Percentage of childless marriages.	Percentage of first-born children.
0	99	1
1	84	15
2	51	33
3	37	14
4	26	11
5	19	7
6	13	6
7	9	4
8	8	1
9	5	3

forth. Now the percentage of childless marriages for marriages of various durations is as shown in the margin. These figures show the percentage of childless marriages on the total number of marriages which have lasted from "*n*" to "*n*+1" years, where "*n*" is the tabled value of the duration of marriage. Thus of 100 marriages which have completed 4 years, 37 per cent. are childless at the end of the 4th year. From this result, assuming that we are dealing with marriages in which there is no mortality in the first 10 years, we find the percentage of first-born children occurring as in column 3 of the marginal table, so that the majority of

* Here a marriage classed as of duration 3 years, say, will have lasted less than 4 years and not less than 3 years. A marriage of 0 year's duration is one that has lasted less than 1 year.

† The statement in the text is not equivalent to saying that the maximum likelihood of a female first-born is for marriages of 7 years' duration.

first-born occur in marriages of 2 years' duration, that is in the 3rd year of marriage.*

We may assume, therefore, that the first child is most usually born in the 3rd year of marriage, and that consequently for a marriage in the 9th year, say, that is of 8 years' duration the first child was born 6 years previously. For marriages in the 1st and 2nd years it will be appropriate to assume that the first-born child has occurred 0 years previously. So, for marriages which had, say, 8 years' duration at the time of the Family Census (1920-21) it will be proper to compare the sex-ratio of the first-born with the sex-ratio of all children born in 1915. For marriages of 7 years' duration the comparison must be made with the general sex-ratio of births in 1916 and so on. The following result is reached :—

Duration of marriage in years.	Year for which the general sex-ratio at birth is selected.	Sex-ratio of first-born female/male.	General sex ratio at birth.
0	1921	0.00	..
1	1920	0.78	0.90
2	1920	0.75	0.90
3	1920	0.76	0.90
4	1919	0.81	0.89
5	1918	0.85	0.89
6	1917	0.82	0.91
7	1916	0.87	0.91
8	1915	0.85	0.91
9	1914	0.85	0.91

On the face of it, therefore, the conclusion to be drawn is that although some part of the variation of the sex-ratio for marriages of longer duration is to be attributed to a secular change in the general sex-ratio, yet the proposition is probably true that while the proportion of female to male births is about 9 to 10, the proportion of female to males among first-born children is only about 8 to 10. If the data are reliable the result is of great physiological and sociological significance; but, however attractive fearless assertion may be, it is wiser to remind the reader of the pride that the Punjabi takes in his male children, and of the effect that pride may have in causing him to misstate the sex of his first-born.†

* Age of the woman at marriage.

134. When we observe that there were 64 persons (37 males and 27 females) who were *widowed* before the age of 5, enumerated in the 1921 Census, the youthfulness of some bridegrooms and brides has been sufficiently emphasized. As is well-known, consummation of the marriage does not take place (perhaps many years later) till the *mukhlawa* ceremony has been performed, the bride in the meantime living with her parents. Even so the marriage proper will take place as soon as possible after the girl has reached the age of puberty. Unlike the schedules of the main census, the Family Census schedules record the duration of marriage dating from the time at which the woman came to live in her husband's house, and therefore the "duration of marriage" does not correspond with the period elapsing since the time of the civil marriage, nor with the time elapsed since the commencement of cohabitation. In fact, the recorded "duration of marriage" will ordinarily date from the time of the *mukhlawa* (home-bringing) ceremony, which usually takes place several years after the initial *nikah* or *shadi*.

* This would not be exactly true if the Family Census was not a strictly random selection from all marriages. It is probable that it is not so, and that District Officers naturally tended to get information about marriages which had larger rather than smaller families.

† The percentage of childlessness for each of the first ten years of marriage for each caste-group separately is as follows :—

Duration of marriage.	0	1	2	3	4	5	6	7	8	9 years.
Caste-group 1 ..	100	80	49	37	24 *	16	15	10	5	4
" " 2 ..	99	84	51	37	26	19	12	9	9	4
" " 3 ..	100	86	50	40	28	17	10	9	7	6
" " 4 ..	100	80	39	34	23	18	13	9	9	4
" " 5 ..	99	88	57	41	29	22	17	11	7	7
" " 6 ..	100	83	49	32	27	18	12	10	8	6

(civil marriage), and, not infrequently, a good time before the actual consummation of the marriage with the husband.†

In studying the data of the Family Census, therefore, it must be remembered that when we find that 15 per cent. of the women were below the age of 10 at marriage, that this denotes that these girls had been married civilly at a very young age indeed, and had actually come to reside in their husband's home (though not necessarily to cohabit with him) before the age of 10.

The results obtained from the Family Census are exhibited in two tables, the first showing the actually observed numbers of women of each age at marriage, and the latter the relevant percentages. The data are given separately for each caste-group.

Table showing the actual number of women whose "age at marriage" is given.

	Below 10.	10—14.	15—19.	20—24.	25—29.	30—34.	35—39.	40 and over.	Total.
ALL CASTES ..	23,413	55,673	48,685	16,761	5,409	2,106	875	589	153,511
Caste-group 1..	3,490	6,447	3,988	972	290	118	129	98	15,532
„ 2..	9,330	24,361	23,422	8,353	2,417	1,007	317	199	69,406
„ 3..	1,603	4,631	3,384	950	235	68	35	12	10,918
„ 4..	950	2,627	2,319	790	244	90	43	23	7,086
„ 5..	5,179	10,395	8,823	3,241	976	393	157	125	29,289
„ 6..	2,861	7,212	6,749	2,455	1,247	430	194	132	21,280

Table showing the percentage numbers of women whose "age at marriage" is given.

	Below 10.	10—14.	15—19.	20—24.	25—29.	30—34.	35—39.	40 and over.	Total.
ALL CASTES ..	15.2	36.3	31.7	10.9	3.5	1.4	0.6	0.4	100
Caste-group 1..	22.5	41.5	25.7	6.2	1.9	0.8	0.8	0.6	100
„ 2..	13.4	35.1	33.7	12.0	3.5	1.5	0.5	0.3	100
„ 3..	14.7	42.4	31.0	8.7	2.2	0.6	0.3	0.1	100
„ 4..	13.4	37.1	32.7	11.2	3.4	1.3	0.6	0.3	100
„ 5..	17.7	35.5	30.1	11.1	3.3	1.3	0.5	0.4	99.9
„ 6..	13.4	33.9	31.7	11.5	5.9	2.0	0.9	0.6	99.9

From this it will appear that a greater percentage of clerics (22.5) marry girls below the age of 10 than any other caste-group. Next in order of preference for very young wives come menials (17.7 per cent.), then traders (14.7), and lastly agriculturists, artisans and criminals, all of whom marry when 13.4 per cent. of their wives are below the age of ten. Caste-group 3, comprising a majority of traders, has the most marked aversion of all to marry women above the age of 40.†

§Hardly less striking that the immaturity of the wife at the time of arrival at her husband's home, is the immaturity of the husband himself. Among certain tribes of the Central Punjab this immaturity may result in the girl-wife reaching puberty before the boy-husband, a circumstance of which the boy's father is apt to take advantage. A Punjabi saying pithily sums up the consequences by concluding that "the firstborn child is the child of his grandfather and not of his father." The genetic effects of this practice will be that the correlation of the characters of the putative father and son will fall below the value of about one-half which is the anticipated correlation for true paternal inheritance. The point will be discussed further in examining the anthropometric data collected by the writer from the Central Punjab, a task which is deferred to Chapter XI.

*"Age at marriage" must be interpreted in the sense explained, viz., "age at which the woman comes to live in her husband's home."

†The general agreement between the figures for various caste-groups is, perhaps, partial evidence that the Family Census results are not entirely vitiated by the age-distortion which was a feature of the age returns in the main census.

Effect of age
of woman
at marriage
on fertility.

135. In order to determine what effect, if any, early or late marriages have on fertility, it would be necessary to compare the number of children born for all "completed" marriages, that is to say of 30 years' duration and over, the only variable factor being the age of the women at marriage. Even this would not enable a just estimate of the effect of early or late marriages to be made, as, should early or late marriages tend to increase mortality, this consequence would be obscured, owing to the exclusion from the data of marriages in which one parent had died.

At first sight the requisite information might appear to be available on examining the figures of the number of children for all marriages, of whatever duration, classified according to the age of woman at marriage. The data are exhibited in the statement below :—

Statement of the percentage age-groups of age of woman at marriage with 0, 1, 2, 3 to 5 and 6 to 10 living children for all caste-groups from the Family Census records.

Age of woman at marriage in years.	Below 10	10—14	15—19	20—24	25—29	30—34	35—39	40 and over.	Total.
Percentage on enumerated childless marriages ..	19.1	39.1	26.8	8.6	3.3	1.8	0.8	0.5	100
Percentage on enumerated marriages with 1 child living ..	16.9	37.6	30.6	9.4	3.0	1.3	0.6	0.7	100
Percentage on enumerated marriages with 2 children living ..	15.2	37.1	30.9	10.6	3.6	1.5	0.7	0.4	100
Percentage on enumerated marriages with 3 to 5 children living ..	14.3	34.8	33.2	11.9	3.7	1.3	0.5	0.2	100
Percentage on enumerated marriages with 6 to 10 children living ..	13.8	36.4	32.2	11.7	2.6	1.3	0.7	0.3	100
Percentage on enumerated total number of mar- riages with 0, 1, 2, 3 to 5 and 6 to 10 children living ..	15.2	36.3	31.7	10.9	3.5	1.4	0.6	0.4	100

The conclusions which this table suggests are exactly those which fit in with our preconceived notions of the evil effects of early or late marriages. For this very reason we must be careful to see what fallacies may underlie the seeming simplicity of the data.

Thus, if we look down the columns for the age of the woman at marriage, we observe that *as the number of children increases—*

- (1) the proportion of marriages for the age of woman at marriage below 10, *diminishes*,
- (2) the proportion of marriages in which the woman is between 10 and 14, *diminishes*,
- (3) the proportion of marriages in which the woman is between 15 and 29 at marriage, *increases*,
- (4) the proportion of marriages in which the woman is over 30, *diminishes*.

Three explanations seem possible, namely:—

I.—That in the years immediately preceding the Family Census of 1920-21, there had been an increase in the number of very early or very late marriages. As a recent marriage must necessarily tend to be a childless marriage at the time of the Family Census, this would account for the relatively high proportion of childless marriages and marriages producing a small number of children, for women marrying below 15 and over 30.

II.—That when the age of the woman at marriage is below 15 and over 30, that the mortality rate of *either* parent, or both parents, becomes higher than in the general population. This would tend to make such marriages of short duration, and, therefore, relatively infertile.

III.—That when women marry below 15 or above 30, the resulting marriage is less fertile than marriages which take place when the woman is between those ages.

Explanation II is, in a sense, virtually the same as explanation III, as if either parent dies, as a consequence of the immaturity or excessive maturity of the woman, at the time of marriage, this is a legitimate argument against such marriages. The first explanation is not, I think, consonant with what is generally believed as regards the increase in the age of woman at marriage during recent years, and therefore explanations II and III may be accepted as correct alternative interpretations of the data, and admit the conclusion that marriages in which the woman is below 15 or above 30 years of age at marriage are relatively infertile.

136. In order to compare the relative fertility of one section of the population with another, it is desirable, in the first instance, for simplicity's sake, to examine only the figures for "completed" marriages, which will be the term applied here to marriages of 30 years' duration and over. For this purpose the table compiled below is apposite—

Size of families

Statement of the percentage of families with 0, 1, 2, 4, 8 and 12 living children for "completed" marriages of 30 years' duration and over.

	CASTE-GROUP NUMBERS.						
	1	2	3	4	5	6	1—6
Percentage of families with 0 children living ..	6.04	5.66	4.68	5.69	7.68	6.56	6.12
Percentage of families with 1 child living ..	28.66	18.77	20.20	18.62	20.77	20.98	20.62
Percentage of families with 2 children living ..	32.82	32.59	27.09	30.90	31.32	31.68	31.85
Percentage of families with 3 to 5 children living	26.39	35.53	38.81	36.76	33.66	32.67	34.04
Percentage of families with 6 to 10 children living	6.06	7.36	9.07	7.91	6.49	8.03	7.27
Percentage of families with 12 or more children living ..	0.03	0.09	0.15	0.13	0.08	0.08	0.11

This indicates that for "completed" marriages sterility is very low forming only about 6 per cent. of all such marriages; the highest degree of sterility (7.68 per cent.) being found among menials (comprised in caste-group 5) and the lowest (4.68 per cent.) among traders (caste-group 3).

The most usual size of family for "completed" marriages is from 3 to 5 children, except among clerics (caste-group 1) for which a family of 2 is more common than any other. The mean size of family for "completed" marriages has been calculated by assuming that where the number of recorded children is between 3 and 5 it was actually 4, where it is recorded as between 6 and 10 it

Mean size of families, i. e., of living children for "completed" marriages.

Caste-group.	Number of living children.	Number of children born.
1. Clerics ..	3.70	5.15
2. Agriculturists ..	4.03	5.70
3. Traders ..	4.27	6.05
4. Artisans ..	4.10	6.24
5. Menials ..	3.88	5.83
6. Criminals ..	4.05	5.45
All Castes ..	3.99	5.68

was actually 8. The results are recorded in the margin. The results in the first column of figures give the living children, and for marriages of such long duration as 30 years, which are the only ones included in these data, the number of children lost by death is considerable. The results given in the second column of figures show the total fertility, that is the total number of children born, whether alive or not at the time of the Family Census. Thus, while artisans have the greater gross fertility, they come only second to traders in nett fertility, whilst the lowest fertility, both gross and nett, is possessed by the clerics.

Variation
of fertility
with duration
of marriage.

137. The terms "gross" and "nett" fertility have been used in the preceding paragraph to denote the number of children born in the past to a single marriage at any given moment, and to the number of children of a single marriage alive at the time of the Family Census. The terms will be used in this sense throughout.

To obtain the "gross" and "nett" fertilities for any given duration of marriage the number of children born and alive, as shown for each caste-group in the sorters' tickets, was divided by the number of marriages for various durations of marriage.*

The results are given in Subsidiary Tables IX-A and IX-B for the "gross" and "nett" fertilities for males and females separately. Naturally the gross fertility rises more or less steadily right up to marriages of 30 years' duration and over, both for males and females. The nett fertility, however, for females shows signs of diminishing as the duration of marriage approaches 30 years.

Diagram 12.

**DIAGRAMS SHOWING GROSS AND NET FERTILITY (I.E. FOR ALL CHILDREN
BORN ALIVE AND CHILDREN NOW LIVING) FOR VARYING DURATION OF
MARRIAGE ACCORDING TO THE PUNJAB CENSUS 1921—
FOR CASTE GROUP I.**

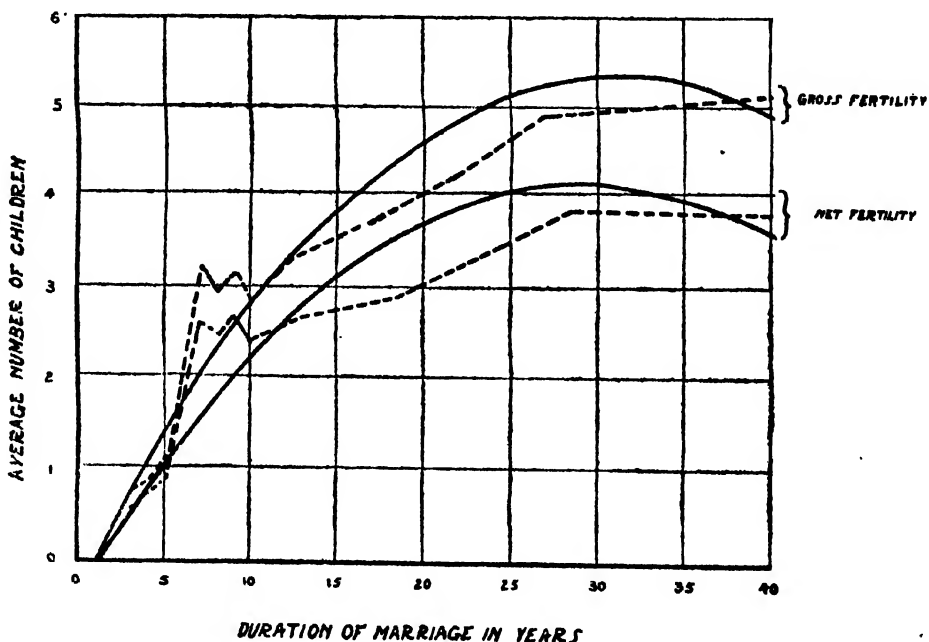
SMY, BHATRA, BHATORRAI, BRAHMAN,
PADHA, ULNA, KATASTHA, KHATRI,

EQUATION OF PARABOLA GROSS FERTILITY

$$Y = -2.608 + .3769 X - .0063 X^2$$

EQUATION OF PARABOLA NET FERTILITY

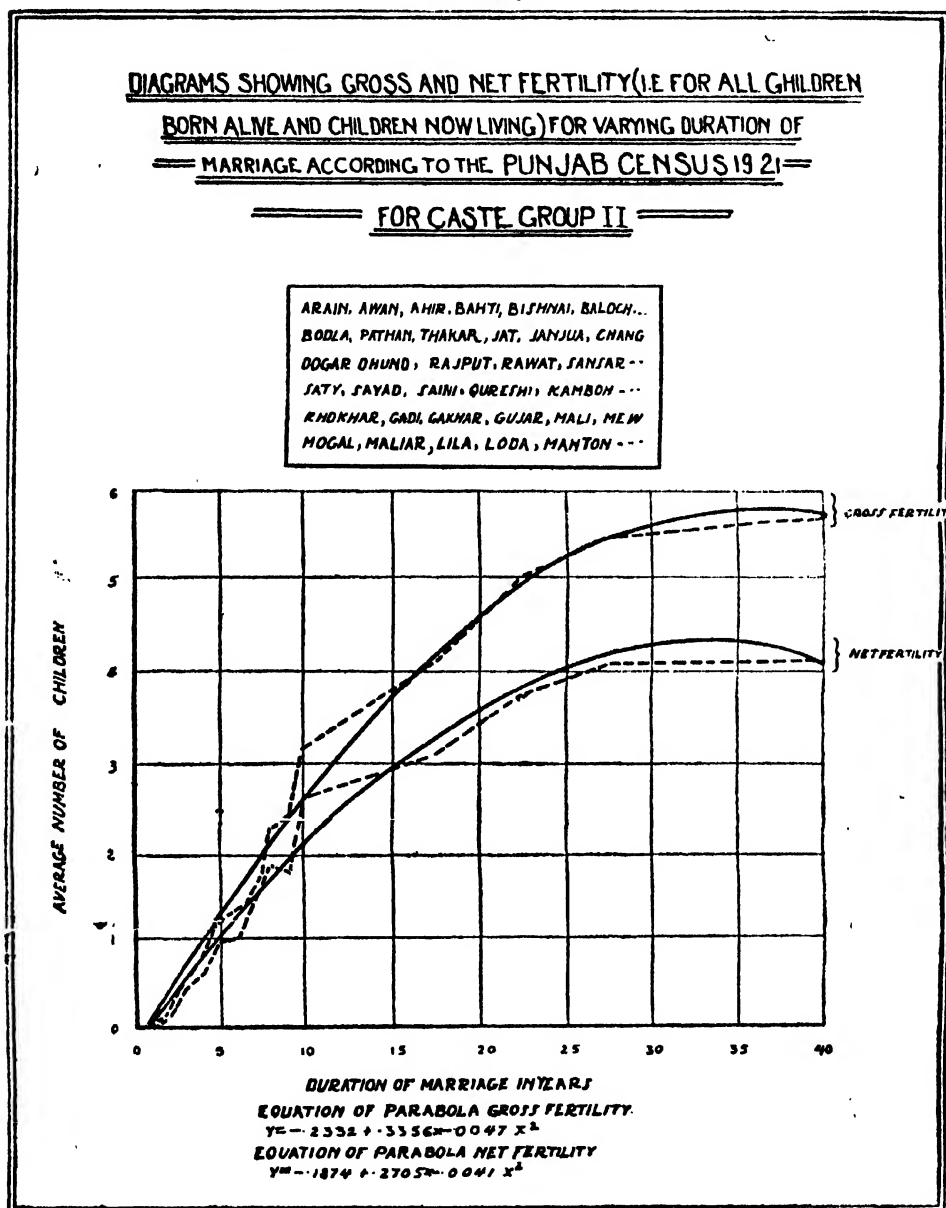
$$Y = -2.149 + .3109 X - .0055 X^2$$



*As very few persons are likely to read a census report, or even a chapter, right through, it is necessary to repeat that the duration of marriage is measured from the time the wife comes to live in her husband's house, and does not date from the time of the civil marriage.

As the figures for the gross and nett fertilities show certain irregularities, which can hardly be due to anything but chance or minor inaccuracies in the statistics, it seems desirable to graduate them by means of some appropriate formula. This was done for all caste-groups separately, and for the totality of caste-groups. The graduation used was that of an equation of the second degree fitted by the method of least squares, the condition imposed being that the fertility (both nett and gross) was zero for a marriage of a duration of 0·7 years. This period, which is equivalent to about 8½ months, corresponds to the minimum time from the time of marriage within which a child is likely to be born.

PLATE 43.



The resultant equations connecting the number of children born (y) with the duration of the marriage in years (x) are as follows for each caste-group:—

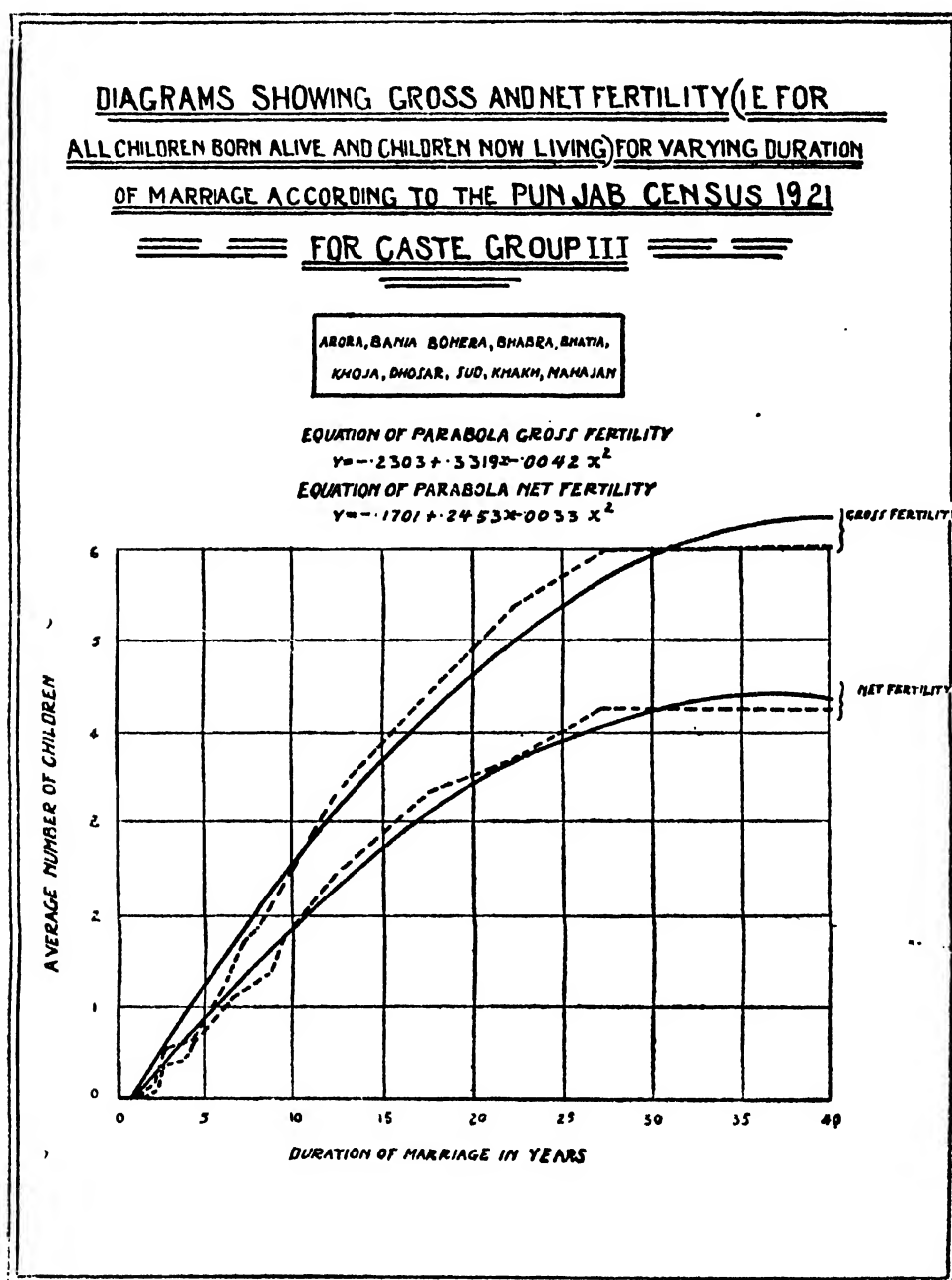
Gross fertility curves.

All caste-groups	..	..	..	$y = -2331 + 3363x - 0017x^2$
Caste-group 1	..	..	..	$y = -2603 + 3769x - 0063x^2$
" " 2	..	..	..	$y = -2332 + 3356x - 0017x^2$
" " 3	..	..	..	$y = -2303 + 3319x - 0012x^2$
" " 4	..	..	..	$y = -2296 + 3308x - 0011x^2$
" " 5	..	..	..	$y = -2177 + 3136x - 0038x^2$
" " 6	..	..	..	$y = -2154 + 3050x - 0010x^2$

The similarity of all these equations is remarkable, and they show that during the first few years of married life we may say that, roughly, one child is born in every 3 years. The rate of child-bearing shows a steady falling off with duration of marriage, and practically vanishes, for ordinary Punjab conditions, after 36 years of married life.

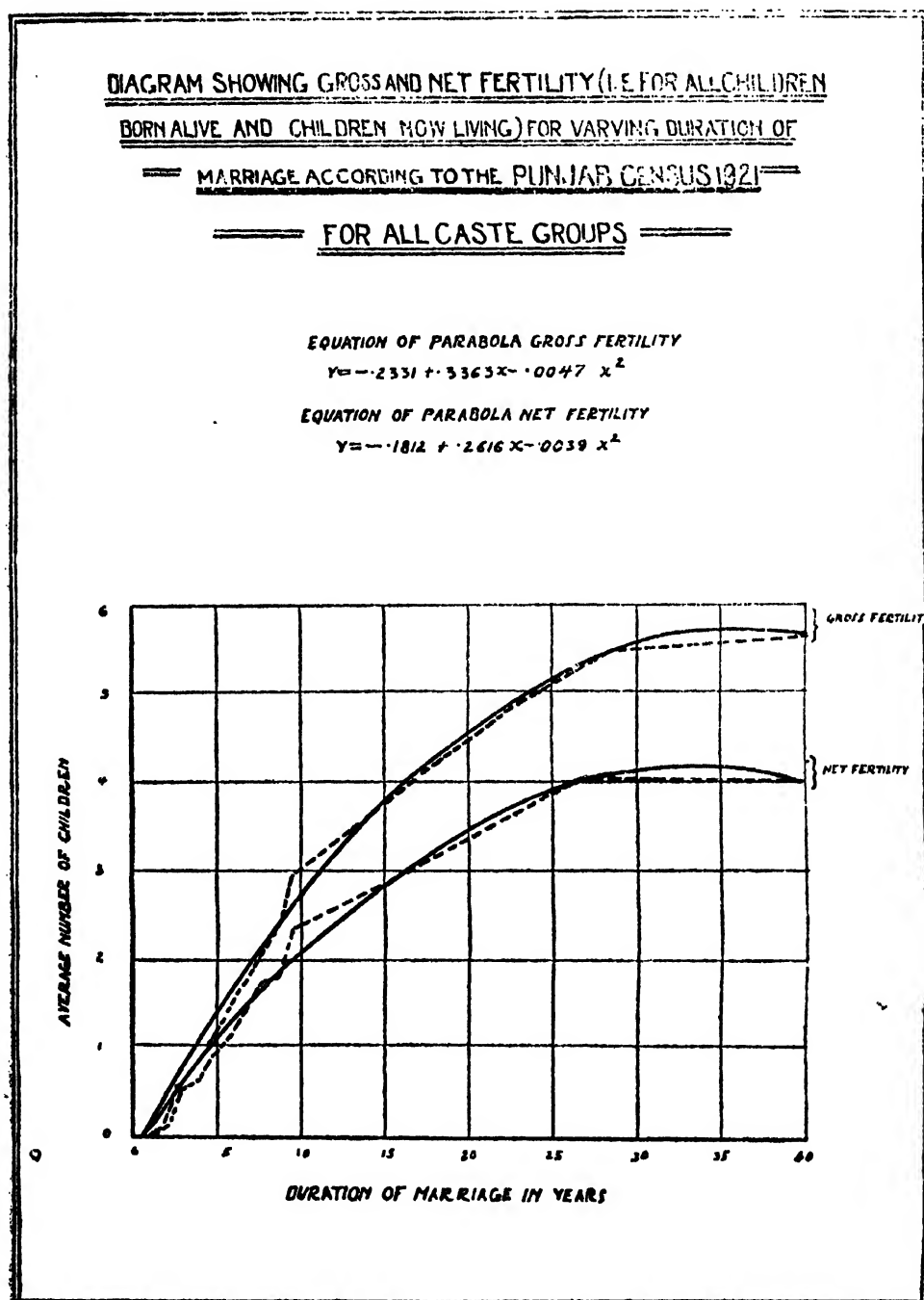
Diagrams 42, 43, 44 and 45 exhibit the actually observed values of the "gross" and "nett" fertilities; together with the curves of graduation, for caste-groups 1, 2 and 3 (clerics, agriculturists and traders) and all castes together.

Diagram 44.



Special attention may be drawn to Diagram 42 which gives the fertility curves for the clerical, religious and generally literate classes. In this case the graduation cannot be described as at all successful, as the observed fertilities rise sharply till 3 children have been born, after about 7 years of married life, and thereafter rise very slowly indeed. Contrasted with all the other curves* the failure of the graduation is conspicuous, and the conclusion seems probable that the high class Hindu knows something of the effective use of contraceptives.

Diagram 43.



* The inclusion of 000.15 by prevents the reproduction of the diagram, for castes-groups 4, 6 and 8, for which the parabolic graduation formula affords close agreements with the actual data.

The most
favourable
time to be
born is.

For the rest the diagrams must speak for themselves.

138. It has been trenchantly observed that many of us are very unfortunate in the choice of our parents. Having chosen one's parents however, it is not unimportant to choose the right moment to be born at. The question of the "handicapping of the firstborn" has been dealt with by Professor Karl Pearson.*

It seems clear that the data of the Punjab Family Census would provide some answer to the question "what are the relative chances of survival of a child born in the 1st, 2nd, 3rd and subsequent years of marriage?" The difficulty is to find the appropriate form of analysis. An attempt to examine the problem is made in Appendix 5, to which the mathematical reader is referred.

The results alone are of general interest, and may be briefly summarised here. If we represent by a co-efficient k_m , the ratio of the likelihood of survival for a given number of years, of a child born in the m -th year of marriage, to the likelihood of survival for the same number of years of any person,† then if k_m is greater than unity, it is clear that the m -th year of a marriage is a favourable year for a child to be born in; if k_m is less than unity the m -th year is an unfavourable one to be born in.

Year of marriage.	Relative chance of survival of child born in that year of marriage.
1	1.08
2	1.12
3	1.08
4	1.08
5	1.01
6	1.01
7	0.96
8	0.91
9	0.88
10	0.78

The figures in the margin give the relative chance of survival for children born in each of the first ten years of marriage. This, of course, affords only a rough indication of the relative prospects of survival of the firstborn as compared with the laterborn children, but serves to show, if the method of analysis is valid, that it is better to be born in the first six years of marriage than later on.

Section III.—Cousin Marriage.

Contrast between Hindu and Muslim marriage.

139. There is hardly any social phenomenon more striking than the cleavage between the Hindu and Musalman in respect of the custom of inbreeding. Among the latter community inbreeding is almost enjoined as a duty, in the former it is wholly taboo.

The Hindu must marry, unless he has adopted Arya tenets, within his caste; he must marry within his section; but he must not marry within his *gotra* or clan. The Musalman definitely seeks a near relation, a first cousin for preference, as his bride.

Here, if anywhere, is a genetic experiment on a large scale, which ought, one may suppose, to decide the vexed problem of the advantages and disadvantages of cousin marriage. As the two great communities, speaking of the Punjab as a whole, live side by side, eat the same food, follow the same pursuits, and, at any rate among the rural population, which forms nearly 90 per cent. of the whole, are scarcely differentiated at all in respect of house accommodation and environment generally, the material seems admirably adapted to show whether cousin marriage is a eugenic or a dysgenic practice.

Enquiry into percentage of cousin marriage.

140. An essential preliminary is to determine the percentage of cousin marriage among Musalmans, and for this purpose I had a special enquiry carried out by my Personal Assistant, Sheikh Abdul Majid, LL. B., in the districts of Attock, Muzaffargarh and Gurdaspur. He received careful instructions to include all cases, whether the husband and wife were related or not, so as not to exaggerate the percentage of cousin marriage, and these instructions were, I believe, adhered to. In order to prevent mistakes in entering up the relationship of husband and wife, when it existed, a detailed genealogical table was drawn up, and the synopses have been based directly on these genealogies. The total number of cases recorded is 855 for the 3 districts, and the data cover 10 different castes. The data for the Sayad caste alone was recorded in all the three districts.

*I have not access to the literature of the subject at the present time, but if my recollection serves me Professor Pearson found that the firstborn son was more unstable than the laterborn sons both in mental and physical characteristics.

†The general survival rates have been taken from Table P, Life Table, Males, page 187, Census of India Report 1911, Volume I, Part I, drawn up by Mr. Acland.

The summarised results are given in the table below :—

Number and percentage of certain castes who marry relations.

District.	Caste.	Description of wife.	MARRYING 1ST COUSINS.		MARRYING COUSINS.		Total cases.	
			Number.	Percentage	Number.	Percentage		
Attock	Awans	First wife	81	50	108	67	161	
		Other wives	2	5	7	19	37	
	Maliars	First wife	52	48	68	63	108	
		Other wives	0	..	2	18	11	
	Qureshis	First wife	1	20	1	80	5	
		Other wives	0	..	0	..	0	
	Rajputs	First wife	3	20	12	80	15	
		Other wives	0	..	1	17	9	
	Sayads	First wife	12	80	11	93	15	
		Other wives	0	..	3	60	5	
	Total District			151	12	219	60	363
	Muzaffargarh	Bilochs	First wife	77	11	97	52	188
Other wives			2	10	8	33	21	
Pathans		First wife	2	9	5	23	22	
		Other wives	0	..	1	11	9	
Qureshis		First wife	17	63	17	63	27	
		Other wives	0	..	0	..	1	
Sayads		First wife	2	29	2	29	7	
		Other wives	0	..	0	..	1	
Total District			100	36	130	47	279	
Gurdaspur		Arain	First wife	28	32	36	41	87
			Other wives	1	14	1	14	7
		Gujjars	First wife	1	33	1	33	12
	Other wives		0	—	0	..	5	
	Jats	First wife	8	14	12	21	50	
		Other wives	1	10	1	10	16	
	Rajputs	First wife	7	23	8	27	30	
		Other wives	0	..	0	—	1	
	Sayads	First wife	0	..	1	20	5	
		Other wives	0	..	0	..	0	
	Total District			49	23	63	30	213
	TOTAL ATTOCK, MUZAFFARGARH AND GURDASPUR DISTRICTS			300	35	412	48	855

The above summary does not distinguish between marriages of cousins of other grade than first cousins, and for the detail of marriages between first cousins once removed, second cousins and so forth Subsidiary Tables IX-A, IX-B, IX-C and IX-D should be consulted.

Of the 3 districts Attock and Muzaffargarh are distinctively Musalman districts, while Gurdaspur contains exactly 50 per cent. of Musalmans. The variation of the percentage of cousin marriage among Musalmans with the variation in the *proportion* of Musalmans in the population of the district is very remarkable. The figures are these—

District.	PERCENTAGE OF MUSALMANS WHO MARRY		Percentage of Musalmans total population of district.
	First Cousins.	Cousins.	
Attock	42	60	91
Muzaffargarh	36	47	87
Gurdaspur	23	30	50

The conclusion is most strongly suggested that in districts where there are relatively fewer Musalmans, their natural preference for marriage with a near relative is modified by contact with the exogamous Hindu. The converse proposition, however, is not true, as may be noted in the Muzaffargarh district, where though there is no less than 81 per cent. of Musalmans, the Hindu population recorded no single instance of a cousin marriage from among 203 cases into which enquiry was made. In the Attock district, from among Khattris, no cousin marriages were observed, though marriage within the section, as well as within the caste, is practically universal. Of the 3 sections of Khattris, the Khokharan, Bâhri and Bunjahi, the first named is a purely endogamous section, but the last two are reported now to be inclined to inter-marry one with the other. We may conclude, therefore, that Hindus are uninfluenced in the direction of cousin marriage, or of any kind of endogamy, by their Musalman neighbours. *

* Since the above chapter was written the following data have been obtained for the Delhi Province in which there is 29 per cent. of Musalmans.

Number and percentage of certain Musalman castes who marry relations.

DELHI PROVINCE.

Caste.	Description of wives.	MARRYING FIRST COUSINS.		MARRYING COUSINS.		Total cases
		Number.	Percent- age.	Number.	Percent- age.	
Jats	First wife	0	0	0	0	40
	Other wives	0	0	0	0	6
Meos (Mowatis)	First wife	3	6	3	6	51
	Other wives	0	0	0	0	18
Pathans	First wife	3	7	5	12	41
	Other wives	0	0	1	9	11
Sayads	First wife	7	14	15	30	50
	Other wives	2	17	2	17	12
	Total	15	7	26	11	229

The absence of cousin marriage among Jats and its rarity among Meos are not surprising in view of the fact that both castes are converted from Hinduism.

Pathans in Delhi are less inclined to marry cousins (12%) than they are in Muzaffargarh (38%) while Sayads in Delhi marry 30 per cent. of cousins as against 93 per cent. in Attock and 29 per cent. in Muzaffargarh.

141. Lastly, among Musalmans it is much more likely that the first wife will be a cousin than the second or later wives. This is to be attributed to the greater social importance of, and the closer observance of custom demanded from a first marriage than from a second. In the first marriage the man follows the dictates of the tribe, in the later marriages he pleases himself.

Tendency to
marry cousins
most marked
for first mar-
riages.

CHAPTER VII.

I. Distribution by Civil Condition of 1,000 of each sex, religion and main age-period of last five censuses, Punjab and Delhi. III. Distribution by main age-periods and Civil Condition of 10,000 of each sex and religion, Punjab and Delhi. IV. tion of 1,000 of each sex at certain ages for selected castes, Punjab and Delhi. VI, VI (1), VI (2), VI (3), VI (4), VI (5), VI (6). Each slip corresponds to one marriage. VII-A. Statement showing gross fertility for male and female children born alive and female children new living for varying durations of marriage for caste groups. VIII-A. Statement showing the observed and VIII-B. Statement showing the observed and calculated average net fertility (i. e., for children living) for varying dura Attock District. IX-B. Relationship of husband and wife (Musalmans), Muzaffargarh District. IX-C. Relationship of huse rised dates of Hindu marriages for the Punjab, 1910-1921, as given by Pandit Devi Dial Jotshi

SUBSIDIARY

Distribution by Civil Condition of 1,000 of each sex, religion and.

MALE.																
RELIGION AND AGE.	Unmarried.					Married.					Widowed.					
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
ALL RELIGIONS.																
Under 5 ..	999	999	999	998	992	{ 1	1	1	1	8	{ ..	..	..	1	{ ..
5-9 (inclusive) ..	986	986	986	975	982	{ 13	13	11	24	8	{ 1	1	..	1	{ ..	
10-14 ..	923	911	911	845	882	{ 73	84	87	151	115	{ 4	5	2	4	{ ..	
15-19 ..	722	706	699	678	654	{ 263	275	290	404	334	{ 15	19	11	18	{ ..	
20-39 ..	259	261	252	196	251	{ 660	661	695	738	697	{ 81	78	53	66	{ ..	
40-59 ..	77	77	79	74	90	{ 708	718	767	725	753	{ 215	205	154	201	{ ..	
60 and over ..	56	63	62	61	70	{ 541	535	587	541	592	{ 403	402	351	395	{ ..	
HINDU.																
Under 5 ..	998	998	999	998	988	{ 2	2	1	2	12	{ ..	..	..	1	{ ..
5-9 (inclusive) ..	976	978	983	964	988	{ 22	21	16	35	12	{ 2	1	1	1	{ ..	
10-14 ..	880	874	875	795	845	{ 113	119	122	200	151	{ 7	7	3	5	{ ..	
15-19 ..	619	640	629	525	603	{ 330	336	357	455	381	{ 21	24	14	20	{ ..	
20-39 ..	232	240	238	191	245	{ 674	673	701	731	695	{ 94	87	61	72	{ ..	
40-59 ..	88	91	98	92	106	{ 670	683	728	688	717	{ 242	226	174	220	{ ..	
60 and over ..	71	76	80	82	87	{ 502	508	550	507	558	{ 427	416	370	411	{ ..	
MUSALMAN.																
Under 5 ..	999	1,000	1,000	999	995	{ 1	..	..	1	5	{ ..	..	..	..	{ ..
5-9 (inclusive) ..	991	990	993	985	995	{ 8	9	7	14	5	{ 1	1	..	1	{ ..	
10-14 ..	948	936	944	898	919	{ 50	61	55	99	79	{ 2	3	1	3	{ ..	
15-19 ..	776	759	769	636	710	{ 213	228	223	319	281	{ 11	13	8	15	{ ..	
20-39 ..	263	261	257	188	249	{ 661	667	695	753	706	{ 73	69	48	59	{ ..	
40-59 ..	57	56	54	49	66	{ 752	761	810	769	796	{ 191	183	136	182	{ ..	
60 and over ..	38	45	40	41	51	{ 581	572	625	581	629	{ 381	383	335	378	{ ..	
CHRISTIAN.																
Under 5 ..	1,000	999	1,000	998	998	{ ..	1	..	1	2	{ ..	1	..	1	{ ..	
5-9 (inclusive) ..	990	994	995	987	996	{ 4	5	5	8	2	{ 1	1	..	1	{ ..	
10-14 ..	958	955	966	954	966	{ 40	42	33	44	34	{ 2	3	1	2	{ ..	
15-19 ..	793	782	819	816	921	{ 195	205	145	172	76	{ 12	13	6	12	{ ..	
20-39 ..	332	492	718	765	825	{ 603	465	267	221	162	{ 65	43	15	14	{ ..	
40-59 ..	45	58	76	88	177	{ 762	798	821	780	714	{ 193	174	109	132	{ ..	
60 and over ..	29	38	31	29	87	{ 597	581	650	640	558	{ 374	381	319	331	{ ..	
JAIN.																
Under 5 ..	998	999	1,000	998	990	{ 2	1	..	2	10	{ ..	..	..	1	{ ..
5-9 (inclusive) ..	992	971	990	974	990	{ 6	21	9	25	10	{ 2	2	1	1	{ ..	
10-14 ..	915	888	821	681	768	{ 80	103	169	312	230	{ 5	9	2	4	{ ..	
15-19 ..	693	543	404	403	435	{ 388	428	521	565	540	{ 19	29	15	32	{ ..	
20-39 ..	234	241	231	193	205	{ 652	633	680	694	700	{ 114	123	89	113	{ ..	
40-59 ..	122	125	123	115	126	{ 553	558	602	566	614	{ 325	317	275	319	{ ..	
60 and over ..	91	107	103	84	108	{ 356	332	404	331	395	{ 553	501	493	585	{ ..	
SIKH.																
Under 5 ..	1,006	1,000	1,000	995	992	{ ..	..	..	1	8	{ ..	..	..	4	{ ..
5-9 (inclusive) ..	994	988	992	970	970	{ 6	11	8	24	8	{ ..	3	7	10	{ ..	
10-14 ..	934	915	907	822	873	{ 63	78	91	168	125	{ 11	20	10	27	{ ..	
15-19 ..	731	717	676	551	636	{ 258	263	314	422	354	{ 11	20	10	27	{ ..	
20-39 ..	317	292	267	212	267	{ 606	616	686	711	685	{ 77	92	47	77	{ ..	
40-59 ..	125	115	111	111	125	{ 649	654	743	685	720	{ 220	231	146	204	{ ..	
60 and over ..	90	101	98	99	100	{ 483	400	546	484	546	{ 427	439	356	417	{ ..	

SUBSIDIARY TABLES.

Delhi. II. Distribution by Civil Condition of 1,000 of each sex at certain ages in each Religion and Natural Division, Punjab
Proportion of the sexes by Civil Condition at certain ages for Religions and Natural Divisions. V. Distribution by Civil Condi-
Showing the data collected from the Family Census, Punjab, 1920-21, for marriages for which both husband and wife were alive,
for varying duration of marriage for caste groups (Punjab Census 1921). VII-B. Statement showing net fertility for male
calculated average gross fertility (i. e., for all children born alive) for varying durations of marriage for different caste groups,
tions of marriage for different caste groups (Punjab Census 1921). IX-A. Relationship of husband and wife (Musalmans),
band and wife (Musalmans), Gurdaspur District, IX-D. Relationship of husband and wife (Musalmans), Delhi Province. X.---Autho-

TABLE I.
main age—period of last five Censuses, Punjab and Delhi.

FEMALE.														
Unmarried.					Married.					Widowed.				
1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
998 959 744 227 20 7 7	999 957 706 203 20 8 11	999 963 713 227 19 5 4	997 925 632 92 10 5 5	974 925 632 157 14 5 5	2 40 251 753 890 615 241	1 41 287 773 882 585 221	1 36 283 755 896 608 217	3 73 459 879 857 482 183	26 26 362 821 888 583 209	2 1 5 20 90 378 752	2 2 7 24 98 407 768	1 1 4 18 85 387 779	2 2 9 29 133 513 812	2 6 9 22 98 412 786
997 930 630 124 9 4 4	998 934 598 110 10 5 7	998 944 609 121 8 2 2	996 892 399 39 4 3 3	962 68 532 87 7 2 2	3 68 362 848 874 553 195	2 63 392 856 863 525 179	2 55 385 855 887 565 184	4 106 591 928 839 434 148	37 459 884 874 537 181	2 8 28 117 443 801	3 10 31 127 470 814	1 6 24 105 433 814	2 10 33 157 563 849	1 9 22 119 461 817
999 974 811 305 30 11 10	999 970 779 281 28 11 13	999 978 802 327 30 7 6	998 952 662 146 15 6 6	983 721 227 21 7 7	1 25 185 680 896 619 268	1 28 216 702 895 627 246	1 22 195 661 899 637 239	2 47 332 832 874 518 205	17 275 757 897 618 229	1 4 15 74 340 722	2 5 17 77 362 741	3 12 71 356 755	1 6 22 111 476 789	4 16 82 375 764
999 978 860 333 50 21 18	999 983 841 423 93 34 24	999 994 877 507 124 55 33	996 982 835 431 121 56 21	997 971 692 120 38 14	1 21 138 656 897 695 315	1 15 156 564 845 693 343	1 6 122 482 833 657 277	1 16 161 559 822 613 274	3 27 305 826 652 233	1 2 11 53 284 667	2 3 13 62 273 633	1 1 11 43 268 690	2 1 10 87 331 705	2 2 3 54 310 753
1,000 982 799 143 7 4 7	997 980 740 123 12 11 13	999 979 677 91 6 3 6	996 957 466 31 4 2 2	987 584 80 8 4 5	2 16 816 806 466 176	1 15 814 770 456 172	4 42 524 798 415 119	13 407 888 844 501 180	13 407 888 844 501 180	2 7 41 187 530 817	1 5 63 218 533 815	1 5 28 134 469 835	1 10 51 198 583 879	9 32 148 495 764
999 975 776 207 8 2 3	999 965 703 171 12 5 7	999 970 704 189 8 2 2	994 924 507 55 5 6 7	978 627 129 8 2 2	1 24 221 780 917 652 256	1 32 289 807 894 594 235	3 69 471 895 859 632 216	22 368 854 914 634 244	1 3 13 75 346 741	3 8 22 94 401 758	1 3 13 69 335 764	7 22 50 136 462 777	3 22 50 178 364 764	

SUBSIDIARY TABLE I.—concluded.

Distribution by Civil Condition of 1,000 of each sex, religion and main age-period of 1921.

RELIGION AND AGE.	PUNJAB.						DELHI.					
	Male.			Female.			Male.			Female.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13
ALL RELIGIONS.												
Under 5	999	1	..	998	2	..	999	1	..	999	1	..
5—9 (inclusive)	986	13	1	959	40	1	980	19	1	945	53	2
10—14 "	924	72	4	746	249	5	850	142	8	609	385	6
15—19 "	725	260	15	230	751	19	588	384	28	94	885	21
20—39 "	261	658	81	20	890	90	190	714	96	16	900	84
40—59 "	78	708	214	7	616	377	50	718	232	8	553	439
60 and over	56	541	403	7	242	751	39	516	445	10	214	776
HINDU.												
Under 5	998	2	..	997	3	..	999	1	..	999	1	..
5—9 (inclusive)	976	22	2	930	68	2	976	22	2	939	60	1
10—14 "	882	111	7	633	359	8	823	168	9	542	451	7
15—19 "	654	325	21	127	845	28	530	438	32	53	924	23
20—39 "	235	671	94	9	872	119	163	727	110	8	899	93
40—59 "	89	670	241	4	554	442	55	676	269	4	525	471
60 and over	71	504	425	4	195	801	45	463	492	7	192	801
MUSALMAN.												
Under 5	999	1	..	999	1	..	1,000	..	..	998	2	..
5—9 (inclusive)	991	8	1	974	25	1	990	10	..	900	38	2
10—14 "	948	50	2	812	185	3	919	78	3	747	249	4
15—19 "	776	213	11	307	678	15	723	259	18	169	814	17
20—39 "	264	663	73	30	896	74	204	725	71	20	920	60
40—59 "	57	751	192	10	650	340	34	810	156	11	614	375
60 and over	38	581	381	10	268	722	26	626	348	15	261	724
CHRISTIAN.												
Under 5	1,000	..	..	999	1	..	997	3	..	999	1	..
5—9 (inclusive)	991	8	1	980	19	1	946	54	..	915	85	..
10—14 "	961	34	2	868	130	2	709	279	12	592	404	4
15—19 "	800	188	12	331	658	11	619	347	34	373	620	7
20—39 "	317	615	68	44	904	52	530	441	29	173	763	64
40—59 "	43	763	194	19	699	282	101	754	145	79	588	333
60 and over	29	597	374	18	315	667	30	583	387	65	290	645
JAIN.												
Under 5	998	2	..	1,000	..	..	996	4	..	1,000	..	..
5—9 (inclusive)	991	7	..	984	15	1	996	4	..	966	23	11
10—14 "	917	78	5	806	187	7	899	98	3	697	290	7
15—19 "	590	392	18	152	810	38	617	361	22	61	868	71
20—39 "	241	644	115	8	805	187	180	708	112	4	815	181
40—59 "	127	548	325	4	465	531	87	590	323	3	474	523
60 and over	94	351	555	7	172	821	66	394	540	10	211	779
SIKH.												
Under 5	1,000	..	..	999	1	..	1,000	..	..	1,000	..	..
5—9 (inclusive)	994	6	..	975	24	1	984	16	..	981	19	..
10—14 "	934	63	3	776	221	3	879	114	7	900	100	..
15—19 "	731	258	11	267	780	13	699	269	32	164	823	13
20—39 "	317	696	77	8	917	75	251	686	63	26	942	32
40—59 "	125	649	226	2	652	346	35	826	139	..	663	337
60 and over	90	483	427	3	256	741	42	583	376	48	238	714

SUBSIDIARY TABLE II.

Distribution by Civil Condition of 1,000 of each sex at certain ages in each Religion and Natural Division.—Punjab.

RELIGION AND NATURAL DIVISION.	MALES.																	
	All Ages.			0—4 (inclusive).			5—9 (inclusive).			10—14 (inclusive).			15—19 (inclusive).			20 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PUNJAB.																		
All Religions	537	375	88	999	1	..	986	13	1	924	72	4	366	568	66	71	658	271
Hindu	509	392	99	998	2	..	976	22	2	882	111	7	331	592	77	81	623	293
Musalman	551	370	79	999	1	..	991	8	1	948	50	2	379	562	59	51	690	250
Christian	582	347	71	1,000	..	..	991	8	1	964	34	2	427	518	55	38	711	251
Jain	520	358	122	998	2	..	991	7	2	917	78	5	320	587	93	120	503	377
Sikh	553	352	95	1,000	..	..	994	6	..	934	63	3	416	523	61	114	597	289
INDO-GANGETIC PLAIN WEST.																		
All Religions	527	375	98	999	1	..	982	16	2	900	95	5	347	579	74	80	615	305
Hindu	508	386	106	999	1	..	973	25	2	855	137	8	308	606	86	87	587	326
Musalman	532	378	90	999	1	..	987	12	1	929	68	3	351	581	68	50	662	288
Christian	563	361	76	999	1	..	985	14	1	939	58	3	384	553	63	33	705	262
Jain	513	362	125	997	3	..	992	7	1	903	92	5	303	599	98	114	500	386
Sikh	554	348	98	1,000	..	..	994	5	1	938	60	2	422	515	63	118	584	298
HIMALAYAN.																		
All Religions	478	439	83	995	5	..	970	28	2	898	97	5	338	601	61	66	715	219
Hindu	480	438	82	995	5	..	970	28	2	898	97	5	337	602	61	75	709	216
Musalman	471	438	91	998	2	..	972	26	2	881	115	4	335	600	65	70	678	252
Christian	578	386	36	1,000	..	..	1,000	..	..	980	20	..	543	443	14	121	751	128
Jain	429	488	83	1,000	..	..	1,000	..	..	857	143	..	364	617	19	197	661	242
Sikh	439	469	92	1,000	..	..	967	31	2	855	143	2	305	633	62	84	655	261
SUB-HIMALAYAN.																		
All Religions	540	368	92	1,000	..	..	990	9	1	938	59	3	381	556	63	71	650	279
Hindu	521	372	107	999	1	..	983	14	3	915	80	5	369	557	74	91	598	311
Musalman	544	371	85	1,000	..	..	991	8	1	948	50	2	376	565	59	48	688	264
Christian	599	330	71	1,000	..	..	997	3	..	980	19	1	483	467	50	46	696	258
Jain	559	329	112	1,000	..	..	988	6	6	988	5	7	395	530	75	141	508	351
Sikh	548	352	100	1,000	..	..	992	8	..	931	64	5	419	522	59	119	587	294
NORTH-WEST DRY AREA.																		
All Religions	570	365	65	999	1	..	994	5	1	961	37	2	401	548	51	57	732	211
Hindu	544	380	76	999	1	..	989	10	1	943	52	5	373	567	60	72	687	241
Musalman	576	361	63	999	1	..	995	5	..	968	31	1	409	511	50	54	741	205
Christian	594	345	61	1,000	..	..	996	4	..	985	14	1	402	546	52	32	747	221
Jain	508	395	97	1,000	..	..	978	22	..	969	31	..	331	591	78	102	594	304
Sikh	559	376	65	1,000	..	..	993	6	1	920	78	2	374	578	48	74	711	215
FEMALES.																		
PUNJAB.																		
All Religions	403	463	134	998	2	..	959	46	1	746	249	5	65	860	75	7	511	482
Hindu	365	477	158	997	3	..	930	68	2	633	359	8	35	867	98	4	456	540
Musalman	430	451	119	999	1	..	974	25	1	812	185	3	88	850	62	10	542	448
Christian	476	435	89	999	1	..	980	19	1	868	130	2	109	848	43	19	594	387
Jain	389	424	187	1,000	..	..	984	15	1	806	187	7	41	806	153	4	397	599
Sikh	389	475	136	999	1	..	975	24	1	776	221	3	51	888	61	3	533	464
INDO-GANGETIC PLAIN WEST.																		
All Religions	394	468	138	998	2	..	951	48	1	707	288	5	49	873	78	4	499	497
Hindu	373	477	150	997	3	..	929	69	2	608	385	7	27	878	95	2	465	533
Musalman	419	456	125	999	1	..	962	37	1	772	224	4	71	863	66	7	520	473
Christian	456	450	94	998	2	..	969	30	1	829	169	2	102	851	47	16	578	406
Jain	386	424	190	1,000	..	..	984	16	..	784	208	8	39	804	157	3	395	602
Sikh	385	474	141	999	1	..	976	23	1	785	213	2	51	887	62	2	626	472
HIMALAYAN.																		
All Religions	323	502	175	996	4	..	900	97	3	610	379	11	44	852	104	6	440	554
Hindu	320	503	177	996	4	..	900	97	3	610	379	11	40	854	106	5	437	558
Musalman	369	501	130	997	3	..	895	102	3	585	401	11	64	865	71	5	493	502
Christian	611	320	69	996	4	..	997	3	..	997	3	..	152	524	24	235	476	289
Jain	302	468	230	1,000	..	..	1,000	..	..	818	182	..	16	905	79	..	182	818
Sikh	330	535	135	991	7	2	922	78	..	453	540	7	53	906	71	2	472	526
SUB-HIMALAYAN.																		
All Religions	395	463	142	999	1	..	963	36	1	752	243	5	64	861	75	7	508	485
Hindu	361	468	171	998	2	..	941	57	2	655	337	8	36	861	103	4	445	551
Musalman	410	459	131	999	1	..	971	28	1	790	205	5	77	857	66	8	530	462
Christian	478	430	92	1,000	..	..	986	13	1	889	108	3	110	848	42	16	599	385
Jain	411	416	173	1,000	..	..	987	11	2	920	77	3	56	814	130	12	413	675
Sikh	373	485	142	999	1	..	965	33	2	732	263	5	43	891	66	3	629	468
NORTH-WEST DRY AREA.																		
All Religions	451	441	108	999	1	..	984	15	1	852	146	2	102	838	60	14	561	425
Hindu	420	442	138	998	2	..	970	29	1	775	220	5	64	843	93	9	475	616
Musalman	457	439	104	999	1	..	987	12	1	870	128	2	112	834	54	15	573	412
Christian	503	423	74	999	1	..	993	7	..	880	109	2	86	874	37	10	632	358
Jain	371	453	176	1,000	..	..	971	29	..	607	357	36	31	794	175	..	479	621
Sikh	439	465	96	999	1	..	981	19	1	795	203	2	61	886	53	4	607	389

SUBSIDIARY TABLE II.—concluded.

Distribution by Civil Condition of 1,000 of each Sex at certain ages in each Religion and Natural Division—Delhi.

RELIGION AND NATURAL DIVISION.	MALES.																	
	All Ages.			0—4 (inclusive.)			5—9 (inclusive.)			10—14 (inclusive.)			15—30 (inclusive.)			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
INDO-GANGETIC PLAIN WEST.																		
All Religions	438	464	98	999	1	..	980	19	1	851	142	7	272	646	82	47	677	276
Hindu	422	467	111	999	1	..	976	22	2	823	168	9	241	666	93	53	632	315
Musalman	464	464	72	1,000	..	..	990	10	..	919	78	3	313	627	60	32	771	197
Christian	565	388	47	997	3	..	946	54	..	709	279	12	543	427	30	89	725	186
Jain	439	427	134	990	4	..	996	4	..	899	98	3	267	639	94	82	550	368
Sikh	397	537	66	1,000	..	..	984	16	..	879	114	7	316	625	50	36	788	176
FEMALES.																		
INDO-GANGETIC PLAIN WEST.																		
All Religions	346	521	133	999	1	..	945	53	2	609	385	6	33	897	70	8	477	515
Hindu	327	530	143	999	1	..	939	60	1	542	451	7	18	904	78	4	450	546
Musalman	383	505	112	998	2	..	960	38	2	747	249	4	51	898	51	12	537	451
Christian	430	483	87	999	1	..	915	85	..	592	404	4	216	732	62	76	535	389
Jain	314	484	202	1,000	..	..	966	23	11	697	296	7	16	827	157	4	416	580
Sikh	391	540	69	1,000	..	..	981	19	..	900	100	..	54	918	28	9	580	411

SUBSIDIARY TABLE III.

Distribution by main age-periods and Civil Condition of 10,000 of each Sex and Religion.

Religion and age.	MALES.			FEMALES.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7
PUNJAB.						
ALL RELIGIONS.						
ALL AGES	5,370	3,752	878	4,029	4,627	1,344
0—9 (inclusive)	2,708	19	2	2,951	64	2
10—14 "	1,124	88	5	824	275	5
15—39 "	1,373	2,126	246	239	3,165	276
40 and over	165	1,519	625	15	1,123	1,061
HINDU.						
ALL AGES	5,087	3,922	991	3,651	4,772	1,577
0—9 (inclusive)	2,559	33	3	2,817	105	3
10—14 "	1,046	132	8	694	394	9
15—39 "	1,286	2,306	299	132	3,265	371
40 and over	196	1,451	681	8	1,008	1,194
MUSALMAN.						
ALL AGES	5,514	3,702	784	4,302	4,507	1,191
0—9 (inclusive)	2,846	13	1	3,061	42	2
10—14 "	1,174	61	2	898	204	4
15—39 "	1,379	2,046	214	321	3,161	225
40 and over	115	1,582	567	22	1,160	960
CHRISTIAN.						
ALL AGES	5,825	3,467	708	4,760	4,352	888
0—9 (inclusive)	2,901	12	..	3,327	33	2
10—14 "	1,185	41	3	1,007	151	3
15—39 "	1,663	2,021	214	390	3,049	154
40 and over	76	1,393	491	36	1,119	729
JAIN.						
ALL AGES	5,199	3,581	1,220	3,888	4,237	1,875
0—9 (inclusive)	2,554	12	3	2,794	22	1
10—14 "	1,095	93	6	923	214	8
15—39 "	1,284	2,355	373	162	3,160	599
40 and over	260	1,121	838	9	841	1,267
SIKH.						
ALL AGES	5,534	3,519	947	3,885	4,754	1,361
0—9 (inclusive)	2,559	8	1	2,832	36	2
10—14 "	1,139	77	3	866	247	3
15—39 "	1,555	1,958	228	181	3,164	219
40 and over	281	1,476	715	6	1,307	1,137

SUBSIDIARY TABLE III.

Distribution by main age-periods and Civil Condition of 10,000 of each Sex and Religion—concluded.

Religion and age.	MALES.			FEMALES.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7
DELHI.						
ALL RELIGIONS.						
ALL AGES	4,382	4,639	979	3,459	5,214	1,327
0—9 (inclusive)	2,140	22	2	2,719	75	2
10—14	862	144	7	583	368	6
15—39	1,279	3,033	384	141	3,825	209
40 and over	101	1,440	586	16	946	1,020
HINDU.						
ALL AGES	4,220	4,666	1,114	3,265	5,804	1,431
0—9 (inclusive)	2,137	26	2	2,671	82	1
10—14	835	170	10	507	422	7
15—39	1,137	3,144	442	78	3,904	335
40 and over	111	1,326	660	9	896	1,088
MUSALMAN.						
ALL AGES	4,642	4,642	716	3,834	5,051	1,115
0—9 (inclusive)	2,206	12	..	2,846	57	3
10—14	960	81	3	757	253	5
15—39	1,403	2,812	270	207	3,672	208
40 and over	73	1,737	443	24	1,069	899
CHRISTIAN.						
ALL AGES	5,651	3,883	466	4,296	4,830	874
0—9 (inclusive)	1,780	51	..	2,593	117	..
10—14	510	201	9	554	378	4
15—39	3,227	2,540	178	1,027	3,480	248
40 and over	134	1,091	279	122	855	622
JAIN.						
ALL AGES	4,389	4,274	1,337	3,140	4,841	2,019
0—9 (inclusive)	2,040	8	..	2,548	29	14
10—14	982	107	4	510	216	5
15—39	1,161	2,780	409	72	3,663	697
40 and over	206	1,379	924	10	933	1,303
SIKH.						
ALL AGES	3,968	5,371	661	3,910	5,401	669
0—9 (inclusive)	1,272	10	..	2,845	25	..
10—14	590	76	5	789	88	..
15—39	2,050	4,054	381	263	4,511	138
40 and over	56	1,231	275	13	777	551

SUBSIDIARY TABLE IV.

Proportion of the sexes by Civil Condition at certain ages for Religions and Natural Divisions.

NATURAL DIVISION AND RELIGION,	NUMBER OF FEMALES PER 1,000 MALES.														
	All ages.			0—9 (inclusive).			10—14 (inclusive).			15—39 (inclusive).			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PUNJAB.															
ALL RELIGIONS ..	621	1,021	1,268	902	2,697	888	607	2,588	983	144	1,233	928	79	612	1,405
Hindu ..	593	1,009	1,318	913	2,675	690	549	2,468	885	85	1,174	1,029	35	576	1,453
Musalman ..	659	1,028	1,282	908	2,656	1,177	646	2,810	1,275	197	1,280	889	163	619	1,430
Christian ..	642	987	985	902	2,110	1,278	668	2,854	809	185	1,186	566	371	632	1,169
Jain ..	643	1,017	1,321	940	1,815	333	725	1,985	1,143	109	1,153	1,380	29	645	1,209
Sikh ..	537	1,033	1,104	846	3,290	1,880	581	2,452	731	89	1,236	735	16	677	1,215
INDO-GANGETIC PLAIN WEST.															
ALL RELIGIONS ..	602	1,005	1,130	895	2,528	813	583	2,254	781	108	1,155	796	42	635	1,272
Hindu ..	594	1,000	1,135	900	2,411	631	533	2,109	689	66	1,108	848	21	619	1,278
Musalman ..	651	998	1,152	918	2,636	1,136	632	2,488	1,041	160	1,177	773	115	623	1,305
Christian ..	644	992	984	882	1,869	833	615	2,053	452	206	1,193	583	381	619	1,175
Jain ..	657	1,025	1,330	956	1,636	333	708	1,840	1,273	110	1,149	1,375	20	664	1,312
Sikh ..	525	1,030	1,083	837	3,374	1,729	580	2,445	757	87	1,223	693	13	687	1,209
HIMALAYAN.															
ALL RELIGIONS ..	613	1,036	1,913	961	3,069	1,003	563	3,225	1,740	122	1,333	1,589	81	500	2,054
Hindu ..	609	1,049	1,966	961	3,053	989	562	3,258	1,711	115	1,356	1,646	51	502	2,106
Musalman ..	576	843	1,054	924	3,561	1,250	540	2,849	2,588	132	985	740	44	431	1,183
Christian ..	1,173	923	2,132	1,286	*2,000	..	1,687	250	..	824	1,169	1,714	1,898	622	2,226
Jain ..	452	613	1,778	1,391	..	..	500	667	..	26	864	2,500	..	162	1,687
Sikh ..	521	792	1,017	990	2,600	1,000	366	2,609	2,000	47	889	713	11	413	1,151
SUB-HIMALAYAN.															
ALL RELIGIONS ..	623	1,072	1,314	906	3,365	972	615	3,175	1,263	144	1,328	1,020	75	636	1,414
Hindu ..	569	1,036	1,318	901	3,498	547	548	3,223	1,110	78	1,230	1,103	36	589	1,402
Musalman ..	663	1,089	1,357	915	3,230	1,398	646	3,176	1,645	187	1,379	1,012	144	648	1,469
Christian ..	610	997	983	912	3,963	4,000	701	4,411	1,500	149	1,192	558	267	662	1,146
Jain ..	600	1,032	1,254	863	1,667	333	828	14,500	333	113	1,236	1,393	65	605	1,221
Sikh ..	537	1,089	1,133	862	3,565	2,952	564	2,931	688	80	1,328	864	20	685	1,210
NORTH-WEST DRY AREA.															
ALL RELIGIONS ..	654	999	1,378	898	2,182	942	651	2,903	996	212	1,276	971	185	588	1,547
Hindu ..	618	932	1,467	924	2,471	826	615	3,137	662	129	1,123	1,157	91	521	1,612
Musalman ..	663	1,014	1,382	895	2,067	1,000	659	3,007	1,293	234	1,319	941	221	598	1,558
Christian ..	665	963	957	910	1,720	333	671	5,957	1,500	162	1,165	516	236	607	1,162
Jain ..	529	828	1,303	855	1,000	..	548	10,000	*1,000	59	846	1,417	..	561	1,190
Sikh ..	615	969	1,167	874	2,453	1,187	619	1,863	698	127	1,184	841	41	608	1,293
DELHI.															
INDO-GANGETIC PLAIN WEST.															
ALL RELIGIONS ..	579	824	994	932	2,468	1,075	496	1,874	591	81	925	571	118	482	1,277
Hindu ..	570	838	947	921	2,342	579	448	1,826	525	50	915	559	59	498	1,215
Musalman ..	608	801	1,146	949	3,465	9,000	579	2,285	1,227	109	961	568	244	453	1,492
Christian ..	519	848	1,279	994	1,575	..	740	1,283	286	217	934	950	623	535	1,520
Jain ..	568	900	1,200	933	3,000	*3,000	412	1,607	1,000	49	1,047	1,355	37	537	1,120
Sikh ..	400	408	423	908	1,000	..	543	467	..	52	452	147	91	256	815

* No males in these age-periods.

SUBSIDIARY

Distribution by Civil Condition of 1,000 of each

		DISTRIBUTION OF 1,000 OF EACH SEX														
		MALES.														
CASTE.		All ages.			0-4 (inclusive).			5-11 (inclusive).			12-19 (inclusive).			20-30 (inclusive).		
		Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PUNJAB.																
1. Aggarwal	H. ..	529	351	120	999	1	0	980	17	3	679	304	17	274	611	115
2. Ahir	H. ..	497	383	120	999	1	0	980	18	2	686	297	17	195	686	119
3. Arain	M. ..	532	381	87	999	1	0	979	20	1	802	192	6	228	691	81
4. Arora	H. ..	517	372	81	999	1	0	992	7	1	867	125	8	268	660	72
5. Arora	S. ..	562	366	72	1,000	0	0	992	7	1	847	147	6	241	699	60
6. Awan	M. ..	561	370	66	1,000	0	0	993	6	1	904	91	5	271	668	61
7. Barwala	M. ..	511	361	95	1,000	0	0	992	8	0	802	188	10	215	685	100
8. Bawaria	H. ..	554	373	73	1,000	0	0	987	10	3	798	185	17	188	732	80
9. Bharai	M. ..	531	371	98	1,000	0	0	968	31	1	785	205	10	236	672	92
10. Biloch	M. ..	560	378	62	999	1	0	993	7	0	875	117	8	279	656	65
11. Brahman	H. ..	532	352	116	999	1	0	985	13	2	807	179	14	317	581	102
12. Chamar	H. ..	471	432	97	999	1	0	935	62	3	571	410	19	139	756	105
13. Chamar	S. ..	498	397	105	1,000	0	0	965	34	1	689	298	13	189	707	104
14. Chhimba	H. ..	490	380	130	998	2	0	961	36	3	737	241	22	235	653	112
15. Chhimba	S. ..	530	354	116	1,000	0	0	990	10	0	801	188	11	285	622	93
16. Chhimba	M. ..	533	377	90	999	1	0	976	23	1	797	196	7	203	704	93
17. Chuhra	H. ..	518	369	83	999	1	0	973	25	2	797	190	13	197	715	88
18. Chuhra	S. ..	552	369	79	1,000	0	0	989	10	1	808	184	8	192	726	82
19. Dagi and Koli	H. ..	427	504	69	988	12	0	938	59	3	539	445	16	157	767	70
20. Dhanak	H. ..	409	495	96	992	8	0	784	206	10	406	564	30	70	824	106
21. Dhobi	M. ..	528	386	86	1,000	0	0	982	17	1	827	166	7	232	688	80
22. Dogar	M. ..	564	348	88	1,000	0	0	986	13	1	832	160	8	296	623	81
23. Faqir	M. ..	526	371	103	999	1	0	968	30	2	762	226	12	234	671	95
24. Girth	H. ..	535	378	87	1,000	0	0	997	1	2	900	93	7	223	685	92
25. Gujjar	H. ..	501	395	104	999	1	0	949	48	3	714	260	20	242	659	99
26. Gujjar	M. ..	520	387	93	999	1	0	968	31	1	788	202	10	247	675	78
27. Harni	M. ..	558	351	91	1,000	0	0	992	8	0	850	130	20	268	668	64
28. Jat	H. ..	502	383	115	998	2	0	934	61	5	634	345	21	242	645	113
29. Jat	S. ..	562	341	97	1,000	0	0	988	11	1	821	172	7	361	566	73
30. Jat	M. ..	574	353	73	1,000	0	0	992	8	0	890	105	5	314	621	65
31. Jhiwar	H. ..	506	380	114	999	1	0	975	22	3	756	226	18	208	678	114
32. Jhiwar	S. ..	532	367	101	1,000	0	0	981	19	0	800	192	8	221	678	101
33. Jhiwar	M. ..	530	368	102	1,000	0	0	976	23	1	791	197	12	205	698	97
34. Julaha	H. ..	458	449	93	997	3	0	972	26	2	731	250	19	194	719	87
35. Julaha	M. ..	511	367	92	999	1	0	989	10	1	855	136	9	238	674	88
36. Kamboh	S. ..	623	399	78	1,000	0	0	986	14	0	742	248	10	222	709	69
37. Kamboh	M. ..	511	371	88	999	1	0	985	14	1	804	186	10	202	713	85
38. Kanet	H. ..	436	491	73	987	13	0	929	67	4	716	272	12	198	734	68
39. Kashmiri	M. ..	536	384	80	1,000	0	0	994	6	0	873	121	0	237	687	76
40. Khatri	H. ..	551	369	80	1,000	0	0	992	7	1	897	95	8	304	635	61
41. Khatri	S. ..	557	364	79	1,000	0	0	994	6	0	879	114	7	292	643	65
42. Khoja	M. ..	556	376	68	999	1	0	991	6	0	846	144	10	224	708	68
43. Khokhar	M. ..	583	349	68	1,000	0	0	997	3	0	901	93	6	341	597	62
44. Kumhar	H. ..	482	416	102	999	1	0	969	28	3	687	299	14	166	729	105
45. Kumhar	M. ..	513	371	86	999	1	0	986	13	1	802	194	4	217	679	104
46. Lohar	H. ..	487	410	103	998	2	0	968	30	2	746	240	14	212	683	105
47. Lohar	M. ..	512	379	79	999	1	0	986	13	1	807	184	9	217	703	80
48. Machhi	M. ..	555	364	81	999	1	0	983	17	0	807	187	6	259	654	87
49. Mahtam	S. ..	611	340	49	999	1	0	996	4	0	924	73	3	242	713	45
50. Mali	H. ..	480	401	119	998	2	0	972	25	3	697	286	17	164	725	111
51. Mahar	M. ..	573	351	76	1,000	0	0	995	4	1	918	78	4	263	662	75
52. Mallah	M. ..	582	348	70	1,000	0	0	995	5	0	899	98	3	291	638	71
53. Meo	M. ..	518	386	96	1,000	0	0	990	10	0	774	210	16	146	741	113

TABLE V.

sex at certain ages for selected castes.

AND AGE BY CIVIL CONDITION.

40 and over.			FEMALES.																	
			All ages.			0-4 (inclusive).			5-11 (inclusive).			12-19 (inclusive).			20-39 (inclusive).			40 and over.		
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
132	494	374	376	419	205	998	2	0	961	37	2	318	648	34	6	780	214	3	372	625
73	570	357	368	484	148	999	1	0	920	78	2	209	776	15	2	891	107	4	483	517
48	671	281	427	467	106	999	1	0	942	57	1	465	526	9	27	907	66	8	581	411
71	670	259	403	434	163	998	2	0	966	33	1	455	522	23	21	845	134	10	437	553
79	681	240	422	444	134	999	1	0	973	26	1	469	520	11	13	882	105	4	515	481
41	746	213	419	448	133	1,000	0	0	977	22	1	543	446	11	42	880	78	10	518	472
41	657	302	441	450	109	1,000	0	0	961	39	0	467	522	11	12	917	71	3	571	426
28	740	232	454	462	94	1,000	0	0	962	34	4	422	565	13	11	924	65	6	604	390
58	641	301	304	477	129	998	2	0	895	103	2	372	612	16	21	912	67	9	516	476
45	768	187	427	471	102	999	1	0	978	21	1	531	460	9	26	917	57	12	607	381
130	548	322	346	432	222	1,000	0	0	922	75	3	326	637	37	8	788	204	3	371	626
39	653	308	360	517	123	999	1	0	825	172	3	197	785	18	4	914	82	2	518	480
49	634	317	393	494	113	1,000	0	0	910	89	1	313	676	11	4	914	52	2	548	456
86	565	349	365	491	144	997	3	0	904	93	3	293	691	16	6	899	95	4	495	501
95	572	333	397	470	133	1,000	0	0	961	36	0	390	595	15	4	920	76	3	541	456
42	673	285	428	454	118	1,000	0	0	948	51	1	414	579	7	14	910	76	4	535	461
63	660	277	435	463	102	1,000	0	0	939	60	1	427	563	10	10	920	70	3	564	433
51	669	280	441	462	97	998	2	0	933	66	1	422	567	11	9	922	69	2	570	428
37	771	192	313	542	145	994	6	0	881	116	3	293	683	24	20	893	87	6	531	463
30	667	303	304	589	107	969	31	0	561	433	6	99	886	15	2	923	75	1	515	484
47	689	264	420	464	116	998	2	0	954	45	1	509	475	16	28	900	72	15	565	420
71	638	291	448	431	121	999	1	0	955	44	1	572	421	7	35	883	82	6	529	465
84	603	313	409	469	122	997	3	0	908	91	1	371	618	11	17	907	76	8	531	461
47	705	248	386	452	162	999	1	0	901	98	1	410	573	17	11	873	116	10	380	610
79	623	298	318	524	168	997	3	0	823	175	2	232	750	18	1	890	106	1	485	514
59	662	289	387	486	127	998	2	0	889	109	2	421	566	13	19	912	69	7	526	467
27	683	290	447	430	123	996	4	0	963	37	0	381	619	0	3	929	68	7	506	487
106	557	337	352	508	140	997	3	0	840	152	2	231	759	10	1	909	87	2	486	612
131	576	293	376	480	144	999	1	0	954	45	1	418	544	8	8	916	76	2	529	469
61	704	235	443	444	113	999	1	0	969	30	1	575	416	9	40	890	70	16	555	429
57	610	333	384	474	142	998	2	0	903	95	2	333	651	16	9	898	93	4	479	517
69	621	310	409	463	128	1,000	0	0	966	32	2	377	612	10	6	933	61	3	510	487
42	625	333	418	466	116	998	2	0	930	68	2	413	564	23	17	917	66	6	541	453
45	708	247	344	509	147	999	1	0	879	116	5	242	738	20	10	888	102	15	461	524
50	664	286	433	448	119	999	1	0	961	38	1	517	473	10	25	901	74	8	536	456
51	693	256	426	473	101	1,000	0	0	932	67	1	426	562	12	11	909	80	4	617	379
40	679	281	441	455	104	1,000	0	0	962	37	1	477	508	15	13	927	60	5	536	459
49	767	184	302	535	163	992	8	0	862	135	3	328	646	26	15	885	100	6	196	498
43	713	244	415	439	146	1,000	0	0	974	25	1	551	432	14	30	885	85	8	502	490
119	630	251	394	424	182	999	1	0	973	26	1	499	481	20	20	834	146	5	434	561
94	675	231	389	437	174	1,000	0	0	955	42	3	454	528	18	9	855	136	5	453	542
44	737	219	457	436	107	1,000	0	0	972	27	1	538	451	11	34	892	74	9	558	433
58	726	216	453	427	120	999	1	0	977	21	2	561	422	17	42	879	79	27	527	446
52	647	301	369	491	140	996	4	0	865	133	2	244	740	16	5	899	96	4	471	525
63	679	258	436	447	117	999	1	0	957	42	1	496	491	10	27	901	72	9	548	443
67	656	277	351	501	148	998	2	0	876	121	3	276	702	22	14	887	99	9	483	508
43	702	255	422	463	115	999	1	0	949	50	1	464	524	12	20	912	68	9	546	445
50	696	254	453	439	108	999	1	0	977	22	1	543	449	8	26	911	63	15	557	428
56	760	184	534	389	77	998	2	0	996	4	0	682	315	3	24	917	59	5	632	363
39	588	373	381	482	137	998	2	0	902	96	2	281	705	14	3	897	100	2	469	529
36	723	244	409	459	132	1,000	0	0	976	23	1	533	455	12	20	896	75	8	525	467
46	724	230	458	431	111	1,000	0	0	977	22	1	570	424	6	39	890	71	9	527	464
21	649	330	389	471	140	1,000	0	0	948	51	1	374	614	12	2	899	99	1	418	581

SUBSIDIARY

Distribution by Civil Condition of 1,000 of each

CASTE.		DISTRIBUTION OF 1,000 OF EACH SEX														
		MALES.														
		All ages.			0-4 (inclusive).			5-11 (inclusive).			12-19 (inclusive).			20-39 (inclusive).		
		Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PUNJAB - concluded.																
51.	Mirasi M. ..	512	371	87	999	1	0	982	17	1	816	173	11	255	650	95
55.	Mochi M. ..	538	375	87	999	1	0	989	11	0	849	144	7	233	679	88
56.	Mughal M. ..	538	375	87	1,000	0	0	990	9	1	870	121	9	202	604	74
57.	Musalli M. ..	574	364	62	1,000	0	0	994	6	0	874	120	6	250	685	65
58.	Nai H. ..	502	378	120	1,000	0	0	968	27	5	723	259	18	230	652	118
59.	Nai S. ..	551	311	105	1,000	0	0	993	7	0	832	160	8	318	588	94
60.	Nai M. ..	533	383	81	999	1	0	982	17	1	844	145	11	233	686	81
61.	Pakhiwara M. ..	555	311	101	1,000	0	0	997	3	0	814	154	32	218	646	106
62.	Pathan M. ..	551	383	66	999	1	0	991	8	1	882	112	6	326	614	60
63.	Qsah M. ..	531	387	82	998	2	0	969	29	2	789	199	12	219	694	87
64.	Qureshi M. ..	544	380	76	999	1	0	988	9	3	861	131	8	272	658	70
65.	Rajput H. ..	521	386	93	1,000	0	0	981	14	2	813	146	11	305	617	78
66.	Rajput M. ..	569	357	74	999	1	0	987	12	1	865	128	7	308	628	64
67.	Saini H. ..	491	370	136	1,000	0	0	976	20	4	723	258	19	240	646	114
68.	Saini S. ..	500	384	116	998	2	0	965	34	1	492	502	6	251	653	96
69.	Sansi H. ..	535	361	104	997	2	1	979	20	1	775	212	13	240	649	111
70.	Sayad M. ..	548	377	75	1,000	0	0	990	9	1	878	116	6	269	659	72
71.	Sheikh M. ..	486	421	90	1,000	0	0	976	23	1	814	176	10	221	694	85
72.	Sqnar H. ..	519	381	97	997	3	0	974	24	2	775	209	16	250	660	90
73.	Sunar M. ..	505	381	114	999	1	0	960	40	0	634	334	32	258	520	222
74.	Tarkhan H. ..	495	389	116	998	2	0	964	33	3	713	271	10	208	677	115
75.	Tarkhan S. ..	530	362	108	999	1	0	986	13	1	827	166	7	278	633	89
76.	Tarkhan M. ..	547	375	78	999	1	0	989	10	1	846	146	8	245	679	70
77.	Teli M. ..	512	369	89	1,000	0	0	980	19	1	781	204	12	219	690	91
DELHI.																
DISTRIBUTION OF 1,000 PERSONS OF EACH																
1.	Aggarwal H. ..	389	461	147	1,000	0	0	971	19	10	646	338	16	147	740	113
2.	Aggarwal (Jain) H. ..	433	137	130	1,000	0	0	969	31	0	768	232	0	163	729	108
3.	Ahir H. ..	412	426	132	1,000	0	0	916	54	0	601	381	18	174	682	144
4.	Araia M. ..	402	417	61	1,000	0	0	944	48	8	776	207	17	143	790	61
5.	Brahman H. ..	419	467	114	1,000	0	0	979	21	0	684	297	19	199	697	104
6.	Chamar H. ..	383	528	89	999	1	0	934	61	2	551	424	25	104	787	109
7.	Chuhra H. ..	449	158	93	998	2	0	933	63	4	608	357	35	139	704	97
8.	Dhanak H. ..	398	513	89	1,000	0	0	909	88	3	771	207	19	73	847	80
9.	Dhobi H. ..	500	413	87	1,000	0	0	987	13	0	819	158	23	124	788	88
10.	Dhobi M. ..	468	431	101	1,000	0	0	990	10	0	708	204	28	94	801	105
11.	Dagi and Koli H. ..	371	550	79	996	4	0	985	9	6	725	242	33	114	806	80
12.	Faqir M. ..	452	415	103	1,000	0	0	934	66	0	569	403	28	87	798	115
13.	Gujjar H. ..	503	389	108	1,000	0	0	974	23	3	708	265	27	227	656	117
14.	Jat H. ..	437	453	110	1,000	0	0	933	66	1	453	524	23	194	694	112
15.	Jhiwar H. ..	416	501	83	1,000	0	0	887	104	9	616	309	75	145	770	85
16.	Julaha H. ..	419	185	96	1,000	0	0	962	34	4	597	378	25	185	711	104
17.	Khatri H. ..	371	509	120	1,000	0	0	956	38	6	745	235	20	149	733	118
18.	Kumhar H. ..	381	511	105	1,000	0	0	962	37	1	448	512	40	119	782	99
19.	Lohar H. ..	417	410	113	1,000	0	0	980	20	0	497	376	27	175	711	114
20.	Machhi M. ..	372	548	80	1,000	0	0	957	43	0	503	589	8	158	729	113
21.	Mali H. ..	391	492	117	1,000	0	0	974	20	6	699	288	13	148	737	115
22.	Meo M. ..	446	459	95	1,000	0	0	992	8	0	659	318	23	131	768	101
23.	Mughal M. ..	402	433	75	1,000	0	0	997	3	0	865	130	5	235	708	57
24.	Nai H. ..	430	457	113	997	3	0	971	26	0	600	376	24	133	759	108
25.	Pathan M. ..	417	463	90	999	1	0	989	10	1	830	165	5	251	672	77
26.	Qureshi M. ..	481	428	91	1,000	0	0	970	30	0	855	132	13	226	695	79
27.	Rajput H. ..	413	450	137	997	3	0	980	20	0	695	279	28	180	686	125
28.	Rajput M. ..	411	511	48	1,000	0	0	954	46	0	719	267	14	229	708	63
29.	Saini H. ..	490	166	104	1,000	0	0	983	11	6	709	291	0	136	740	124
30.	Sansi H. ..	364	487	140	1,000	0	0	955	45	0	435	435	130	135	769	96
31.	Sayad M. ..	498	126	76	1,000	0	0	992	8	0	886	104	10	242	692	66
32.	Sheikh M. ..	466	473	61	1,000	0	0	980	19	1	845	146	9	202	733	65
37.	Sunar H. ..	422	408	170	1,000	0	0	951	49	0	730	214	56	169	728	103
34.	Tarkhan H. ..	399	503	98	1,000	0	0	984	11	5	692	277	31	160	764	86
35.	Teli M. ..	445	438	117	1,000	0	0	917	78	7	686	295	19	148	794	68

TABLE V—concluded.

sex at certain ages for selected castes.

AND AGE BY CIVIL CONDITION.

FEMALES.																	
40 and over.			All ages.			0-4 (inclusive.)			5-11 (inclusive.)			12-19 (inclusive.)			20-39 (inclusive.)		
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
56	689	255	427	443	130	999	1	0	957	42	1	533	455	12	37	889	71
47	689	264	438	448	114	998	2	0	971	28	1	511	480	9	24	910	66
42	691	267	408	453	139	999	1	0	967	33	0	517	466	17	40	866	91
46	750	205	486	425	89	999	1	0	981	18	1	582	398	20	39	896	65
85	575	310	359	475	166	999	1	0	901	96	3	284	699	17	6	878	116
100	591	309	403	154	143	997	3	0	970	29	1	476	512	12	17	891	89
40	708	252	433	446	121	999	1	0	958	41	1	513	173	14	29	900	71
61	647	292	451	446	103	1,000	0	0	953	47	0	391	587	19	24	922	51
54	746	200	426	448	126	999	1	0	980	20	0	568	422	10	34	883	81
41	702	257	427	455	118	997	3	0	925	74	1	539	150	11	30	889	81
50	723	227	425	438	137	999	1	0	977	23	0	571	417	12	63	846	91
98	642	260	331	462	207	999	1	0	902	95	3	330	638	32	25	816	159
60	694	216	434	429	137	999	1	0	957	41	2	561	428	11	36	863	101
105	527	368	352	476	172	999	1	0	914	85	1	318	665	17	5	891	101
113	474	413	362	498	140	999	1	0	910	59	1	286	699	15	9	912	79
81	614	305	427	439	134	995	5	0	940	60	0	126	536	38	26	856	118
75	702	223	427	433	140	998	2	0	976	23	1	570	418	12	50	848	102
46	701	253	398	172	130	998	2	0	935	63	2	456	531	13	19	892	89
82	630	288	367	466	167	998	2	0	902	97	1	367	611	22	11	858	131
74	714	212	444	415	111	1,000	0	0	957	41	2	527	163	10	36	887	83
78	590	332	362	492	116	997	3	0	883	116	1	252	730	18	5	902	93
83	594	323	380	486	134	999	1	0	951	48	1	445	537	18	6	913	81
42	713	245	430	457	113	999	1	0	968	31	1	506	481	13	27	905	68
48	661	291	426	460	120	999	1	0	935	63	2	429	560	11	13	915	72

AGE BY CIVIL CONDITION.

49	552	399	298	506	196	999	1	0	968	29	5	109	780	21	7	860	133
75	559	366	312	485	203	1,000	0	0	990	32	8	223	732	15	5	810	185
71	564	365	337	511	152	1,000	0	0	918	82	0	220	769	11	1	910	89
25	771	204	353	559	88	990	10	0	897	98	5	179	711	80	6	956	38
74	606	320	314	472	214	999	1	0	960	36	4	191	766	43	8	821	171
21	761	218	308	579	113	999	1	0	891	196	3	96	890	14	7	923	70
24	685	201	356	540	104	997	3	0	854	143	3	169	815	16	5	927	68
33	675	292	293	595	112	1,000	0	0	708	292	0	137	863	0	0	936	61
89	612	299	353	508	139	1,000	0	0	974	21	5	197	775	28	17	906	77
79	619	302	448	415	107	1,000	0	0	961	39	0	269	731	0	120	719	131
36	758	206	321	582	97	992	8	0	911	89	0	169	797	34	14	931	53
17	626	357	349	536	115	1,000	0	0	721	263	16	221	761	18	11	924	65
84	612	304	324	518	158	1,000	0	0	701	291	5	130	559	11	13	867	120
74	579	347	343	534	123	1,000	0	0	914	86	0	154	840	6	1	939	60
54	676	270	321	537	142	1,000	0	0	918	78	4	173	810	17	7	925	68
50	708	242	288	584	128	1,000	0	0	831	168	1	109	875	16	8	928	64
34	697	299	322	521	157	1,000	0	0	958	42	0	195	796	9	14	888	98
29	629	342	347	536	117	1,000	0	0	891	108	1	121	840	39	2	916	82
22	619	359	355	514	131	1,000	0	0	925	75	0	141	837	22	5	929	66
52	704	244	347	591	62	1,000	0	0	894	106	0	197	787	16	58	942	6
14	698	288	300	532	168	1,000	0	0	937	63	0	179	791	30	11	893	96
22	701	277	359	522	119	1,000	0	0	937	63	0	211	782	7	4	924	71
53	726	221	430	385	185	1,000	0	0	981	19	0	419	568	13	38	899	63
24	616	369	342	509	149	1,000	0	0	952	48	0	211	773	16	9	903	88
40	728	232	309	602	89	996	4	0	963	37	0	276	719	5	20	925	55
69	662	269	473	437	90	1,000	0	0	1,000	0	0	318	670	12	213	722	65
68	500	372	332	523	145	997	3	0	926	73	1	209	777	14	24	872	104
54	863	83	350	543	107	995	5	0	858	138	4	244	727	29	2	941	57
58	637	305	413	478	109	1,000	0	0	952	48	0	17	687	296	9	913	78
0	615	385	273	536	191	1,000	0	0	842	158	0	222	630	148	0	866	135
37	738	225	421	397	182	998	2	0	986	14	0	571	416	13	22	815	163
27	811	162	394	504	102	999	1	0	939	61	0	518	470	12	15	940	45
70	449	481	319	481	200	1,000	0	0	966	34	0	206	784	10	23	844	133
26	687	287	311	565	124	1,000	0	0	942	44	14	141	831	28	0	924	70
22	629	349	420	481	99	992	8	0	868	132	0	374	626	0	0	926	74

SUBSIDIARY TABLE VI.

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP NOS. 1 TO 6.

PART I.		TOTAL NO. OF CASES 166,419.															
Duration of marriages in years	0	1	2	3	4	5	6	7	8	9	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 and over.	Totals of Rows.	
PUNJAB.																	
1. Total No. of cases	308	2,115	2,930	3,592	3,963	4,785	4,911	4,511	6,782	4,293	29,722	25,750	23,232	14,964	34,561	166,419	
2. No. of male children born alive	3	219	972	1,618	2,507	3,696	4,553	5,200	8,489	6,662	52,300	56,674	60,931	44,140	106,496	354,460	
3. No. of female children born alive	..	180	766	1,327	2,059	3,314	4,243	4,651	7,643	6,166	47,908	50,147	52,668	38,166	90,021	309,259	
4. No. of male children now living	3	169	792	1,291	1,919	2,784	3,686	4,051	6,533	5,242	40,661	42,588	45,582	33,048	76,756	265,105	
5. No. of female children now living	..	138	635	1,036	1,675	2,509	3,337	3,751	5,941	4,947	37,205	37,760	39,280	27,931	63,038	229,183	
6. No. of childless marriages	305	1,783	1,484	1,325	1,032	905	631	421	530	219	1,084	508	433	225	490	11,375	
7. No. of male first-born	3	186	824	1,290	1,622	2,098	2,345	2,192	3,376	2,207	16,317	14,260	13,034	8,497	20,265	88,516	
8. No. of female first-born	..	146	622	977	1,309	1,782	1,935	1,898	2,876	1,867	12,321	10,982	9,765	6,242	13,806	66,528	
9. No. of families with 0 children living	306	1,837	1,702	1,636	1,377	1,304	1,019	730	891	414	2,061	1,086	814	393	1,071	16,641	
10. No. of families with 1 child living	2	277	1,152	1,729	1,992	2,404	2,348	1,987	2,563	1,294	7,082	3,709	2,522	1,445	3,611	34,117	
11. No. of families with 2 children living	..	1	76	183	471	849	1,173	1,215	2,159	1,334	8,939	5,709	3,822	2,275	5,578	33,784	
12. No. of families with 3 to 5 children living	..	..	..	44	123	227	365	562	1,075	1,169	11,085	13,670	12,998	8,061	17,882	67,261
13. No. of families with 6 to 10 children living	..	..	..	..	..	1	6	17	94	82	554	1,575	3,066	2,779	6,363	14,537
14. No. of families with over 10 children living	..	..	..	..	..	..	..	..	..	..	1	1	10	11	56	79

PART II.		MARRIAGES OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 153,511.															
Age of woman at marriage.	Under 8.	9	10	11	12	13	14	15	16	17	18	19	20 to 24.	25 to 29.	30 to 35.	35 to 40 and over.	Totals of Rows.
1. No. of families with 0 children living	1,359	507	1,039	628	761	746	651	1,104	453	403	308	263	842	325	178	77	9,783
2. No. of families with 1 child living	3,135	1,757	2,896	1,471	2,179	2,213	2,138	3,450	1,548	1,537	1,285	1,039	2,715	878	365	163	28,965
3. No. of families with 2 children living.	3,300	1,731	3,322	1,714	2,246	2,409	2,579	3,927	2,050	1,612	1,636	980	3,506	1,175	512	219	33,053
4. No. of families with 3 to 5 children living	6,464	3,140	7,524	2,843	4,288	4,015	4,692	9,872	3,474	3,350	3,334	2,270	7,982	2,512	862	311	67,094
5. No. of families with 6 to 10 children living	1,368	639	1,923	670	942	815	944	2,288	700	625	657	405	1,707	519	186	103	14,537
6. No. of families with over 10 children living	11	2	8	5	5	5	2	10	4	2	6	3	9	..	3	2	79
Totals of columns	15,637	7,776	16,712	7,331	10,421	10,203	11,006	20,651	8,229	7,529	7,316	4,960	16,761	5,409	2,106	875	153,511

SUBSIDIARY TABLE VI (1).

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP No. 1.

PART I.

TOTAL NO. OF CASES 16,611.

Duration of marriages in years.	0	1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over	Totals of Rows.
PUNJAB.																
1. Total No. of cases ..	16	164	248	311	340	360	381	492	818	605	2,799	2,365	2,325	1,806	3,578	16,611
2. No. of male children born alive ..	..	30	113	179	227	444	614	765	1,355	902	4,900	4,920	5,500	4,665	9,700	34,434
3. No. of female children born alive ..	..	20	93	154	189	438	625	703	1,268	851	4,634	4,258	4,645	4,234	8,640	30,761
4. No. of male children now living ..	..	20	90	144	183	372	522	618	1,161	758	3,916	3,603	4,250	3,627	7,380	26,677
5. No. of female children now living ..	..	13	72	125	160	348	525	616	1,102	708	3,773	3,281	3,589	3,320	6,239	23,871
6. No. of childless marriages ..	16	131	122	114	83	58	58	49	42	25	108	46	52	22	61	987
7. No. of male first-born ..	..	21	73	115	139	166	177	238	396	315	1,581	1,253	1,289	1,003	2,121	8,890
8. No. of female first-born ..	..	12	53	82	118	136	149	205	380	265	1,107	1,666	984	781	1,396	6,730
9. No. of families with 0 children living ..	16	134	139	141	105	91	82	65	75	39	178	89	76	37	122	1,381
10. No. of families with 1 child living ..	..	30	95	149	171	175	178	229	231	178	735	462	240	219	579	3,611
11. No. of families with 2 children living ..	..	..	14	11	49	66	86	93	336	156	836	472	365	292	663	3,441
12. No. of families with 3 to 5 children living ..	..	..	..	7	15	28	35	99	115	168	951	1,203	1,239	863	1,599	6,321
13. No. of families with 6 to 10 children living ..	..	..	..	..	..	..	3	6	61	64	99	199	404	392	612	1,840
14. No. of families with over 10 children living ..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	3	7

PART II.

MARRIAGES OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 15,532.

Age of woman at marriage.	Under 8.	9	10	11	12	13	14	15	16	17	18	19	20 to 24	25 to 29	30 to 34	35 to 39	40 and over	Totals of Rows.
1. No. of families with 0 children living ..	145	52	91	48	75	70	56	96	49	38	26	19	51	32	7	2	..	854
2. No. of families with 1 child living ..	562	330	378	177	240	232	234	306	154	123	76	55	135	38	31	40	55	3,166
3. No. of families with 2 children living ..	497	320	353	255	305	248	223	314	210	114	87	61	235	42	21	58	22	3,365
4. No. of families with 3 to 5 children living ..	800	473	718	419	501	509	470	745	313	241	265	167	444	152	43	21	19	6,300
5. No. of families with 6 to 10 children living ..	198	111	261	151	171	108	148	228	107	72	75	51	107	26	16	8	2	1,840
6. No. of families with over 10 children living ..	1	1	1	1	..	..	1	1	..	..	..	..	..	..	..	..	..	7
Totals of columns ..	2,203	1,287	1,800	1,050	1,293	1,167	1,131	1,650	834	588	523	353	972	290	114	129	98	15,532

SUBSIDIARY TABLE VI (2).

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP NO. 2.

PART I.		TOTAL NO. OF CASES 74,813.														
Duration of marriages in years.	0	1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over	Totals of Rows.
PUNJAB.																
1. Total No. of cases	135	830	1,225	1,487	1,730	2,110	2,224	2,009	2,774	1,811	12,774	11,629	10,530	6,805	16,740	74,813
2. No. of male children born alive	2	91	402	671	1,174	1,560	1,937	2,345	3,406	2,977	23,088	25,656	27,929	20,177	51,839	163,254
3. No. of female children born alive	..	73	319	534	924	1,339	1,786	2,025	2,968	2,815	21,175	22,802	24,336	16,589	43,624	141,209
4. No. of male children now living.	2	67	335	528	928	1,164	1,711	1,922	2,661	2,405	18,407	19,329	21,305	15,408	37,595	123,767
5. No. of female children now living	..	53	265	403	785	998	1,447	1,734	2,304	2,321	16,662	17,555	18,447	12,423	31,236	106,633
6. No. of childless marriages	133	695	619	549	443	396	256	171	243	76	432	213	144	75	222	4,667
7. No. of male first-born	2	74	346	535	733	916	1,110	996	1,271	953	7,095	6,531	5,937	3,946	9,874	40,419
8. No. of female first-born	..	61	260	403	554	798	858	842	1,160	782	5,247	4,885	4,449	2,784	6,644	29,727
9. No. of families with 0 children living	134	724	707	687	554	566	417	288	380	170	857	451	300	154	472	6,861
10. No. of families with one child living	1	105	493	701	892	1,099	1,119	911	1,075	545	3,059	1,676	1,088	638	1,565	14,967
11. No. of families with 2 children living	..	1	25	82	211	366	544	582	817	540	3,819	2,672	1,757	1,072	2,717	15,265
12. No. of families with 3 to 5 children living	..	..	..	17	73	79	143	223	472	545	4,831	6,159	6,020	3,754	8,886	31,202
13. No. of families with 6 to 10 children living	..	..	..	..	..	..	1	5	30	11	207	671	1,363	1,185	3,067	6,540
14. No. of families with over 10 children living	..	..	..	..	..	..	..	..	..	..	1	..	2	2	33	38

PART II.		MARRIAGE OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 69,406.															
Age of woman at marriage.	Under 8	9	10	11	12	13	14	15	16	17	18	19	20 to 24	25 to 29	30 to 35	35 to 40 and over	Totals of Rows.
1. No. of families with 0 children living	496	175	457	312	314	310	250	428	210	178	195	110	373	122	86	29	4,055
2. No. of families with 1 child living	1,229	692	1,314	551	909	935	883	1,570	763	741	652	534	1,312	402	152	58	12,775
3. No. of families with 2 children living	1,311	542	1,442	776	981	1,153	1,239	1,794	989	746	817	464	1,720	537	280	56	14,886
4. No. of families with 3 to 5 children living	2,797	1,214	3,432	1,074	1,853	1,669	2,173	4,722	1,694	1,773	1,668	1,191	4,107	1,134	406	149	31,112
5. No. of families with 6 to 10 children living.	602	263	861	270	402	365	427	1,031	331	299	330	179	838	222	82	24	6,540
6. No. of families with over 10 children living.	9	..	4	2	2	1	..	5	3	1	2	3	3	..	1	1	38
Totals of columns	6,444	2,886	7,510	2,985	4,461	4,433	4,972	9,550	3,990	3,738	3,664	2,480	8,353	2,417	1,007	317	69,406

SUBSIDIARY TABLE VI (3).

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP No. 3.

PART I.

TOTAL NO. OF CASES 11,879.

Duration of marriages in years.	0	1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over	Totals of Rows.
PUNJAB.																
1. Total No. of cases	18	134	216	256	337	338	342	337	476	289	2,150	1,812	1,622	1,219	2,333	11,879
2. No. of male children born alive	..	15	72	100	207	254	296	323	555	387	3,901	4,288	4,732	3,893	7,727	26,750
3. No. of female children born alive	..	9	58	77	157	199	309	327	497	357	3,276	3,731	4,048	3,533	6,391	22,969
4. No. of male children now living	..	15	53	81	151	188	205	207	381	289	2,886	3,211	3,318	2,787	5,427	19,202
5. No. of female children now living	..	7	45	63	129	161	213	238	356	263	2,571	2,795	2,813	2,429	4,436	16,522
6. No. of childless marriages	18	115	108	103	96	57	31	30	33	16	82	30	24	14	21	781
7. No. of male first born	..	14	62	87	135	158	159	159	241	150	1,176	974	891	656	1,363	6,216
8. No. of female first born	..	5	46	66	106	123	158	148	202	123	892	808	707	549	949	4,882
9. No. of families with 0 children living	18	115	129	125	128	84	70	68	65	32	155	77	52	39	51	1,208
10. No. of families with 1 child living	..	19	79	117	165	178	159	133	177	84	454	252	142	102	220	2,281
11. No. of families with 2 children living	..	..	8	12	36	57	83	92	167	92	621	334	237	164	295	2,198
12. No. of families with 3 to 5 children living	..	..	..	2	8	19	30	43	67	80	891	1,022	937	638	1,268	5,005
13. No. of families with 6 to 10 children living	..	..	..	..	..	..	..	1	..	1	29	127	254	275	494	1,181
14. No. of families with over 10 children living	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	6

PART II.

MARRIAGES OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 10,918.

Age of woman at marriage.	Under 8	9	10	11	12	13	14	15	16	17	18	19	20 to 24	25 to 29	30 to 35	35 to 39	40 and over	Totals of Rows.
1. No. of families with 0 children living	89	29	71	53	75	76	53	87	33	27	20	10	49	14	5	2	..	693
2. No. of families with 1 child living	166	93	200	137	173	181	173	236	116	99	79	63	145	25	11	3	1	1,901
3. No. of families with 2 children living	196	89	248	113	202	151	186	272	151	110	98	76	180	47	11	8	4	2,142
4. No. of families with 3 to 5 children living	512	246	632	284	385	354	400	697	287	215	224	129	451	123	35	17	4	4,995
5. No. of families with 6 to 10 children living	125	57	152	72	88	76	94	176	50	49	45	32	125	26	6	5	3	1,181
6. No. of families with over 10 children living	..	1	..	1	..	1	..	1	..	1	1	..	..	..	..	..	..	6
Totals of columns	1,088	515	1,303	660	923	839	906	1,469	637	501	467	310	950	235	68	35	12	10,918

SUBSIDIARY TABLE VI (4).

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP No. 4.

PART I.		TOTAL NO. OF CASES 7,649.														
Duration of marriages in years.	0	1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over.	Totals of Rows.
PUNJAB																
1. Total No. of cases ..	13	92	129	167	162	223	244	179	337	201	1,383	1,201	1,064	665	1,589	7,649
2. No. of male children born alive ..	..	9	53	91	103	160	225	169	407	309	2,431	2,883	3,075	2,141	5,428	17,484
3. No. of female children born alive ..	..	16	40	59	85	176	175	147	322	256	2,150	2,495	2,597	1,876	4,495	14,889
4. No. of male children now living ..	..	8	44	72	75	117	163	119	295	237	1,801	2,092	2,267	1,569	3,655	12,514
5. No. of female children now living ..	..	14	35	48	62	111	126	111	234	195	1,619	1,869	1,914	1,375	2,736	10,449
6. No. of childless marriages ..	13	74	50	56	37	41	31	17	31	9	38	29	21	10	15	472
7. No. of male firstborn ..	..	7	43	64	68	97	129	90	182	114	752	669	620	373	935	4,144
8. No. of female firstborn ..	..	11	36	47	57	85	81	72	123	78	593	503	423	282	639	3,033
9. No. of families with 0 children living ..	13	76	56	68	46	65	57	31	38	19	79	48	29	14	44	682
10. No. of families with 1 child living ..	..	16	71	88	98	108	107	87	162	49	318	153	103	51	144	1,566
11. No. of families with 2 children living ..	..	..	2	9	16	43	61	45	91	73	436	258	168	72	239	1,513
12. No. of families with 3 to 5 children living ..	..	..	..	2	2	7	18	16	46	60	524	667	605	375	853	3,176
13. No. of families with 6 to 10 children living ..	..	..	..	..	..	..	1	..	..	..	26	75	159	152	306	711
14. No. of families with over 10 children living ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	4

PART II.		MARRIAGES OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 7,086.															
Age of woman at marriage.	Under 8	9	10	11	12	13	14	15	16	17	18	19	20 to 24	25 to 29	30 to 35	35 to 40 and over	Totals of Rows
1. No. of families with 0 children living ..	51	25	51	19	33	33	27	57	29	17	18	9	29	14	7	3	424
2. No. of families with 1 child living ..	142	42	128	59	126	110	97	138	75	84	57	46	124	31	15	6	1,282
3. No. of families with 2 children living ..	142	66	135	65	103	83	134	198	96	64	65	54	183	60	18	5	1,480
4. No. of families with 3 to 5 children living ..	282	99	386	137	201	211	243	483	169	156	163	102	376	109	36	12	3,171
5. No. of families with 6 to 10 children living ..	71	30	97	34	34	44	41	128	20	32	31	28	76	30	14	6	711
6. No. of families with over 10 children living ..	..	..	..	..	1	1	..	..	..	..	..	..	2	..	..	..	4
Totals of columns ..	688	262	797	314	492	482	542	1,004	389	353	334	239	790	244	90	43	7,086

SUBSIDIARY TABLE VI (5).

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP NO. 5.

PART I.		TOTAL NO. OF CASES 31,832.																
Duration of marriage in years.	0	1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over	Totals of Rows.		
PUNJAB.																		
1. Total No. of cases	79	472	536	695	761	980	908	835	1,351	740	6,012	5,211	4,560	2,643	6,016	31,832		
2. No. of male children born alive	1	40	115	262	428	679	753	923	1,589	1,215	10,550	11,537	11,912	8,051	18,842	66,927		
3. No. of female children born alive	..	24	120	253	372	611	668	818	1,510	1,062	9,896	10,261	10,601	7,520	16,202	60,011		
4. No. of male children now living	1	31	119	218	297	499	500	667	1,189	925	7,987	8,628	8,529	5,980	13,252	48,873		
5. No. of female children now living	..	17	103	182	273	486	505	663	1,154	811	7,430	7,656	7,511	5,289	11,043	43,123		
6. No. of childless marriages	78	417	304	285	218	211	158	88	100	55	260	112	115	30	93	2,533		
7. No. of male first-born	1	35	128	226	304	405	385	396	647	359	3,180	2,942	2,508	1,451	3,461	16,438		
8. No. of female first-born	..	20	104	184	230	361	355	351	604	326	2,572	2,190	1,937	1,156	2,462	12,861		
9. No. of families with 0 children living	78	426	346	341	314	294	233	150	192	86	465	280	220	79	239	3,742		
10. No. of families with 1 child living	1	46	180	311	357	457	414	351	542	233	1,411	735	565	261	640	6,540		
11. No. of families with 2 children living	..	..	10	33	79	179	190	226	390	253	1,819	1,148	758	372	974	6,401
12. No. of families with 3 to 5 children living	..	..	..	10	11	49	71	107	226	166	2,166	2,812	2,524	1,464	3,141	12,747
13. No. of families with 6 to 10 children living	..	..	..	..	..	1	..	1	1	2	91	268	493	465	1,069	2,331
14. No. of families with over 10 children living	..	..	..	..	..	..	..	..	..	..	..	1	..	2	7	10
PART II.																		
MARRIAGES OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 29,289.																		
Age of woman at marriage.	Under 8	9	10	11	12	13	14	15	16	17	18	19	20 to 24	25 to 29	30 to 34	35 to 39	40 and over	Totals of Rows.
1. No. of families with 0 children living	389	140	233	107	163	158	140	280	88	83	86	64	192	56	34	11	18	2,238
2. No. of families with 1 child living	665	425	523	331	433	423	435	672	230	268	228	179	520	175	78	21	30	5,045
3. No. of families with 2 children living	725	518	725	287	374	456	428	744	316	304	300	172	640	208	81	38	23	6,339
4. No. of families with 3 to 5 children living	1,277	721	1,510	638	803	762	809	1,070	688	543	565	377	1,550	438	171	62	33	12,726
5. No. of families with 6 to 10 children living	211	101	278	74	145	124	124	424	94	105	83	66	338	99	28	22	15	2,331
6. No. of families with over 10 children living	1	1	1	1	3	1	..	1	..	1	10
Totals of columns	3,288	1,911	3,278	1,337	1,919	1,924	1,937	4,093	1,316	1,303	1,263	848	3,241	976	393	157	125	29,289

SUBSIDIARY TABLE VI (6).

Showing the data collected from the Family Census, 1920-21, for marriages for which both husband and wife were alive. Each case corresponds to one marriage.

CASTE GROUP No. 6.

PART I.

TOTAL NO. OF CASES 23,635.

Duration of marriages in years.	0	1	2	3	4	5	6	7	8	9	10 to 14	15 to 19	20 to 24	25 to 29	30 and over	Totals of Rows.
PUNJAB.																
1. Total No. of cases ..	47	423	576	676	633	774	809	659	1,026	647	4,604	3,499	3,131	1,828	4,306	23,635
2. No. of male children born alive ..	..	34	187	315	308	599	698	676	1,177	872	7,430	7,390	7,783	5,213	12,870	45,611
3. No. of female children born alive ..	..	38	136	250	332	521	680	631	1,078	825	6,777	6,597	6,541	4,414	10,609	39,429
4. No. of male children now living ..	..	28	151	248	282	444	525	488	852	628	5,664	5,725	5,913	3,677	9,447	34,072
5. No. of female children now living ..	..	34	115	215	266	402	521	449	791	619	5,144	4,604	4,976	3,101	7,348	28,585
6. No. of childless marriages ..	47	351	281	218	155	139	94	66	81	38	164	78	77	68	78	1,935
7. No. of male first-born ..	..	35	172	263	243	356	381	313	538	316	2,530	1,891	1,789	1,068	2,511	12,408
8. No. of female first-born ..	..	37	123	195	235	279	331	280	407	293	1,910	1,530	1,265	690	1,716	9,291
9. No. of families with 0 children living ..	47	362	325	274	230	204	160	128	141	68	327	141	137	70	143	2,757
10. No. of families with 1 child living ..	..	61	234	363	309	387	371	276	376	205	1,075	491	384	174	457	5,163
11. No. of families with 2 children living ..	..	..	17	33	80	138	209	177	358	220	1,378	825	537	303	690	4,965
12. No. of families with 3 to 5 children living ..	..	..	..	6	14	45	68	74	149	150	1,722	1,307	1,673	967	2,135	8,810
13. No. of families with 6 to 10 children living ..	..	..	..	..	..	..	1	4	2	4	102	235	303	310	875	1,926
14. No. of families with over 10 children living ..	..	..	..	..	..	..	..	..	..	..	..	..	7	2	5	14

PART II.

MARRIAGES OF 5 YEARS' DURATION AND OVER. TOTAL NO. OF CASES 21,280.

Age of woman at marriage.	Under 8	9	10	11	12	13	14	15	16	17	18	19	20 to 24	25 to 29	30 to 34	35 to 39	40 and over	Totals of Rows.
1. No. of families with 0 children living ..	189	80	133	89	101	99	125	156	44	60	59	61	148	87	39	31	18	1,519
2. No. of families with 1 child living ..	371	175	353	216	304	332	316	628	210	222	193	162	479	207	78	30	20	4,196
3. No. of families with 2 children living ..	429	196	419	218	281	318	369	605	238	274	269	153	548	231	101	44	42	4,836
4. No. of families with 3 to 5 children living ..	796	387	837	391	545	510	597	1,255	423	422	449	304	1,054	556	171	50	43	8,790
5. No. of families with 6 to 10 children living ..	161	77	274	69	102	98	110	301	98	68	93	50	223	116	40	38	8	1,926
6. No. of families with over 10 children living ..	..	..	2	2	..	1	1	..	..	..	2	..	3	..	1	1	1	14
Totals of columns	1,946	915	2,018	985	1,333	1,358	1,518	2,815	1,063	1,046	1,065	730	2,455	1,247	430	194	132	21,280

SUBSIDIARY TABLE VII-A.

Statement showing gross fertility for male and female children born alive for varying duration of marriage for caste groups (Punjab Census 1921).

DURATION OF MARRIAGE.	AVERAGE NUMBER OF MALE AND FEMALE (CHILDREN) BORN ALIVE AT CENSUS OF 1921.													
	Group I.		Group II.		Group III.		Group IV.		Group V.		Group VI.		All Groups.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
0-1	0	0	0.015	0	0	0	0	0	0.013	0	0	0	0.010	0
1-2	0.18	0.12	0.11	.09	0.11	.07	0.10	0.17	0.09	0.05	0.08	0.09	0.10	0.09
2-3	0.46	0.38	0.33	.26	0.33	.27	0.41	0.31	0.27	0.22	0.33	0.24	0.33	0.26
3-4	0.58	0.50	0.45	.36	0.39	.30	0.55	0.35	0.38	0.36	0.47	0.37	0.45	0.37
4-5	0.67	0.56	0.58	.53	0.61	.47	0.64	0.52	0.56	0.49	0.58	0.53	0.63	0.52
5-6	1.23	1.22	0.74	.64	0.75	.59	0.72	0.79	0.69	0.65	0.77	0.67	0.77	0.69
6-7	1.68	1.63	0.87	.80	0.87	.91	0.82	0.72	0.83	0.74	0.86	0.84	0.83	0.87
7-8	1.66	1.43	1.17	1.01	0.96	.97	0.94	0.82	1.11	0.98	1.02	0.96	1.15	1.03
8-9	1.66	1.55	1.23	1.07	1.17	1.04	1.21	0.95	1.18	1.12	1.14	1.05	1.25	1.12
9-10	1.49	1.41	1.04	1.55	1.34	1.23	1.54	1.27	1.64	1.44	1.35	1.27	1.55	1.44
10-14	1.75	1.65	1.80	1.65	1.81	1.52	1.76	1.55	1.75	1.64	1.61	1.47	1.78	1.63
15-19	2.08	1.80	2.21	1.96	2.37	2.06	2.40	2.08	2.20	1.96	2.11	1.89	2.21	1.95
20-24	2.37	1.99	2.65	2.30	2.92	2.49	2.89	2.44	2.61	2.33	2.48	2.09	2.62	2.26
25-29	2.58	2.35	2.97	2.44	3.19	2.90	3.22	2.82	3.04	2.84	2.85	2.41	2.95	2.55
30 and over	2.73	2.41	3.10	2.61	3.31	2.74	3.11	2.83	3.13	2.70	2.99	2.46	3.08	2.61

SUBSIDIARY TABLE VII-B.

Statement showing net fertility for male and female children now living for varying durations of marriage for caste groups (Punjab Census 1921).

DURATION OF MARRIAGE.	AVERAGE NUMBER OF MALE AND FEMALE CHILDREN LIVING AT CENSUS 1921.													
	Group I.		Group II.		Group III.		Group IV.		Group V.		Group VI.		All Groups.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
0-1	0	0	.015	0	0	0	0	0	0.013	0	0	0	.010	0
1-2	0.12	0.08	0.81	.064	0.11	0.05	0.09	0.15	0.07	0.04	0.07	0.08	.08	.07
2-3	0.36	0.29	.27	.22	0.24	0.21	0.31	0.27	0.22	0.19	0.26	0.20	.27	.22
3-4	0.46	0.40	.36	.27	0.32	0.25	0.43	0.29	0.31	0.26	0.37	0.32	0.36	0.29
4-5	0.54	0.47	.54	.45	0.46	0.38	0.46	0.38	0.39	0.36	0.45	0.42	0.48	0.42
5-6	1.03	0.97	.55	.47	0.56	0.48	0.52	0.50	0.51	0.50	0.57	0.52	0.58	0.52
6-7	1.36	1.37	.77	.65	0.80	0.62	0.67	0.51	0.62	0.56	0.65	0.61	0.75	0.68
7-8	1.32	1.25	.96	.86	0.61	0.71	0.67	0.62	0.80	0.72	0.71	0.68	0.90	0.83
8-9	1.42	1.35	.96	.83	0.80	0.75	0.88	0.69	0.87	0.85	0.83	0.77	0.96	0.87
9-10	1.25	1.17	1.33	1.28	1.60	0.91	1.78	0.97	1.25	1.14	0.97	0.96	1.22	1.16
10-14	1.40	1.35	1.44	1.30	1.31	1.20	1.39	1.17	1.33	1.23	1.23	1.12	1.37	1.26
15-19	1.52	1.39	1.66	1.51	1.77	1.54	1.74	1.56	1.45	1.46	1.61	1.32	1.66	1.47
20-24	1.83	1.54	2.02	1.75	2.05	1.74	2.13	1.80	1.87	1.65	1.87	1.59	1.96	1.69
25-29	2.01	1.84	2.26	1.83	2.29	1.90	2.36	2.07	2.26	2.00	2.01	1.70	2.21	1.97
30 and over	2.06	1.74	2.25	1.87	2.32	1.90	2.30	1.72	2.20	1.83	2.19	1.71	2.23	1.83

SUBSIDIARY TABLE VIII-A.

Statement showing the observed and calculated average gross fertility (i.e., for all children born alive) for varying duration of marriage for different Caste Groups.—(Punjab Census 1921).

Duration of marriage.	GROUP I.		GROUP II.		GROUP III.		GROUP IV.		GROUP V.		GROUP VI.		ALL GROUPS.	
	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.
0—1	0	0·11	0·015	0·10	0	0·10	0	0·10	0·013	0·09	0	0·09	0·010	0·10
1—2	0·305	0·47	0·197	0·42	0·179	0·41	0·272	0·41	0·136	0·39	0·170	0·38	0·189	0·42
2—3	0·831	0·82	0·589	0·74	0·602	0·73	0·721	0·73	0·491	0·69	0·561	0·67	0·593	0·73
3—4	1·071	1·14	0·810	1·04	0·691	1·03	0·898	1·03	0·741	0·98	0·836	0·95	0·820	1·04
4—5	1·224	1·46	1·213	1·33	1·080	1·32	1·160	1·32	1·051	1·26	1·106	1·22	1·152	1·33
5—6	2·321	1·77	1·371	1·62	1·316	1·61	1·507	1·60	1·347	1·52	1·447	1·48	1·465	1·62
6—7	3·305	2·07	1·671	1·89	1·769	1·88	1·639	1·83	1·565	1·79	1·703	1·73	1·791	1·89
7—8	2·984	2·35	2·175	2·16	1·926	2·16	1·765	2·15	2·085	2·05	1·982	1·98	2·184	2·16
8—9	3·207	2·63	2·208	2·42	2·210	2·41	2·163	2·42	2·291	2·30	2·180	2·21	2·379	2·41
9—10	2·898	2·92	3·198	2·66	2·571	2·67	2·811	2·67	3·077	2·54	2·623	2·43	2·988	2·66
10—14	3·406	3·46	3·165	3·21	3·338	3·27	3·312	3·27	3·401	3·11	3·086	2·97	3·407	3·24
15—19	3·881	4·10	4·167	4·21	4·425	4·29	4·478	4·20	4·157	4·11	3·997	3·90	4·148	4·21
20—24	4·363	5·03	4·954	4·96	5·413	5·11	5·331	5·14	4·937	4·91	4·575	4·63	4·890	4·95
25—29	4·927	5·35	5·463	5·46	6·092	5·72	6·041	5·77	5·891	5·54	5·272	5·15	5·500	5·40
30 and over ..	5·151	4·74	5·703	5·79	6·051	6·32	6·215	6·45	5·835	6·25	5·454	5·59	5·685	5·70

SUBSIDIARY TABLE VIII-B.

Statement showing the observed and calculated average net fertility (i.e., for children now living) for varying duration of marriage for different Caste Groups.—(Punjab Census 1921).

DURATION OF MARRIAGE.	GROUP I.		GROUP II.		GROUP III.		GROUP IV.		GROUP V.		GROUP VI.		ALL GROUPS.	
	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.
0—1	0	0·09	0·015	0·08	0	0·07	0	0·07	0·013	0·07	0	0·07	0·010	0·08
1—2	0·201	0·38	0·145	0·34	0·164	0·30	0·239	0·31	0·102	0·31	0·147	0·29	0·145	0·33
2—3	0·653	0·67	0·490	0·59	0·451	0·53	0·612	0·55	0·414	0·55	0·402	0·51	0·487	0·57
3—4	0·865	0·91	0·626	0·81	0·563	0·75	0·718	0·78	0·576	0·77	0·685	0·73	0·648	0·80
4—5	1·009	1·20	0·990	1·07	0·810	0·98	0·846	1·00	0·749	0·99	0·866	0·92	0·907	1·03
5—6	2·000	1·46	1·025	1·29	1·041	1·19	1·022	1·22	1·005	1·20	1·093	1·12	1·106	1·25
6—7	2·727	1·69	1·420	1·62	1·222	1·30	1·181	1·43	1·173	1·41	1·293	1·31	1·430	1·46
7—8	2·569	1·92	1·823	1·73	1·320	1·59	1·285	1·63	1·521	1·61	1·422	1·50	1·730	1·66
8—9	2·770	2·14	1·790	1·93	1·548	1·77	1·570	1·82	1·728	1·79	1·601	1·67	1·839	1·86
9—10	2·423	2·34	2·610	2·07	1·910	1·95	2·149	2·01	2·385	1·98	1·927	1·84	2·373	2·05
10—14	2·747	2·81	2·745	2·58	2·538	2·38	2·473	2·44	2·565	2·41	2·348	2·24	2·620	2·48
15—19	2·911	3·54	3·172	3·32	3·314	3·11	3·298	3·16	3·105	3·12	2·952	2·92	3·120	3·20
20—24	3·372	4·00	3·775	3·87	3·780	3·68	3·930	3·73	3·524	3·66	3·478	3·42	3·653	3·73
25—29	3·847	4·18	4·090	4·21	4·279	4·08	4·427	4·09	4·261	4·01	3·712	3·77	4·075	4·06
30 and over ..	3·806	3·43	4·112	4·16	4·228	4·36	4·022	4·24	4·038	4·12	3·901	3·90	4·045	4·04

Relationship of husband and wife (Musalmans), Attock District.

Relationship of husband and wife (Musalmans), Attock District.

Caste.	Description of wives.	NUMBER OF WIVES OF SIMILAR <i>gotra</i> WITH RELATIONSHIP.										NUMBER OF WIVES OF DIFFERENT <i>gotra</i> WITH RELATIONSHIP.						TOTAL NUMBER OF WIVES OF SIMILAR AND DIFFERENT <i>gotras</i> WITH RELATIONSHIP.							REMARKS.			
		NUMBER OF WIVES OF SIMILAR <i>gotra</i> WITH RELATIONSHIP.										NUMBER OF WIVES OF DIFFERENT <i>gotra</i> WITH RELATIONSHIP.						TOTAL NUMBER OF WIVES OF SIMILAR AND DIFFERENT <i>gotras</i> WITH RELATIONSHIP.										
		First cousin.	Second cousin.	Third cousin.	Fourth cousin.	First cousin once removed.	Second cousin once removed.	No relation.	Total.	First cousin.	Second cousin.	Third cousin.	First cousin once removed.	Second cousin once removed.	No relation.	Total.	First cousin.	Second cousin.	Third cousin.	Fourth cousin.	First cousin once removed.	Second cousin once removed.	No relation.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
AWAN	First wife ..	72	2	4	1	13	1	..	1 ²	105	(a) 9	2	(b) 1	(c) 3	..	(d) 41	*56	(a) 81	4	(b) 5	1	(c) 16	1	..	..	(d) £3	*161	*(a) Includes Rajput 1 and Mahars 2. (b) Includes Mahlar 1. (c) Includes Khattars 2. (d) Includes Khattars 3, Jats 2, Mahars 8 and Rajputs 6. †(a) Includes Rajput 1. ‡(a) Includes Khattar 1, Mahars 5, Mughal 1, Rajputs 2 and Sayad 1. §Includes Rajput 1 Sheikh 1 ||Khattar 1.
	Second "	2	..	..	..	3	..	..	4	9	..	..	..	(a) 1	..	(b) 21	†22	2	..	..	..	(a) 4	..	..	..	(b) 25	†31	
	Third "	..	..	..	..	..	..	..	1	1	..	..	..	1	..	†3	†4	..	..	..	1	..	..	..	..	†4	†5	
	Fourth "	..	..	..	..	..	..	..	..	..	..	..	..	..	..	§1	§1	..	..	..	..	..	..	..	..	§1	§1	
MALIAR	First wife	48	7	2	..	6	..	..	16	79	4	1	..	..	..	24	29	52	8	2	..	6	..	..	..	40	108	*Includes Awan 1, Lohar 1 and Pathan 1.
	Second "	..	1	..	..	1	..	..	1	3	..	..	..	..	..	*6	*6	..	1	..	..	1	..	..	..	*7	*9	
	Third "	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	2	2		
QURESHI	First wife.	1	2	..	..	1	..	..	..	4	..	..	..	..	..	*1	*1	1	2	..	..	1	..	..	..	*1	*5	* Includes Arain 1.
RAJPUT	First wife ..	2	3	1	..	4	..	..	1	11	1	(a) 1	..	..	..	(b) 2	*4	3	(a) 4	1	..	4	..	..	..	(b) 3	*15	(a) Includes Awan 1. (b) Includes Awans 2. †Includes Awan 1.
	Second "	..	1	..	..	..	..	..	3	4	..	..	..	..	..	†1	†1	..	1	..	..	..	..	..	..	†4	†5	
	Third "	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1		
SAYAD	First wife ..	6	..	..	..	1	..	1	1	9	6	..	..	..	1	..	6	12	..	..	1	..	1	..	1	15	*Includes Awan 1. Mahar 1.	
	Second "	..	..	..	..	1	..	..	..	1	..	..	..	..	..	*2	*4	..	..	..	2	..	..	..	*2	*5		

SUBSIDIARY TABLE IX-B.
Relationship of husband and wife (Musalmans), Muzaffargarh District.

SUBSIDIARY TABLE IX-B.																								
Relationship of husband and wife (Musalmans), Muzaffargarh District.																								
Caste.	Description of wife.	NUMBER OF WIVES OF SIMILAR <i>gohs</i> WITH RELATIONSHIP.						NUMBER OF WIVES OF DIFFERENT <i>gohs</i> WITH RELATIONSHIP.						TOTAL NUMBER OF WIVES OF SIMILAR AND DIFFERENT <i>gohs</i> WITH RELATIONSHIP.						REMARKS.				
		First cousin.	Second cousin.	Second cousin once removed.	Third cousin.	Third cousin once removed.	No relation.	Total.	First cousin.	Second cousin.	Second cousin once removed.	Third cousin.	Third cousin once removed.	No relation.	Total.	First cousin.	Second cousin.	Second cousin once removed.	Third cousin.		Third cousin once removed.	No relation.	Total.	
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		21	22	23	Total.
BILUCH	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	First wife	74	4	11	2	2	..	68	161	3	..	1	..	..	27	77	4	12	2	2	..	..	91*188*
	Second "	2	1	1	1	..	1	6	12	..	..	..	16	16	2	1	1	1	..	1	11	117†	Includes Jais 4, Thabhar 1, Tarkhan 1.
	Third "	..	1	..	..	..	..	1	2	..	..	..	1	1	..	1	..	..	..	..	2	3	Includes Jai 1.
PATHAN	Fourth "	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	
	First wife	2	3	..	..	..	..	6	11	..	..	..	..	11	2	3	..	..	..	..	17	22*	Includes Mughal 1.
	Second "	..	..	..	..	..	..	..	..	..	1	..	16	16	..	1	..	..	..	..	15	16†	Includes Bilochis 2 and Jai 1.
	Third "	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	
QURESHI	Fourth "	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	
	Fifth "	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	
	First wife	16	..	..	..	..	..	6	21	1	..	..	..	..	17	..	..	..	..	..	10	27	(a) Includes Biloch 1. (b) Includes Bilochis 2, Jais 2 and Sheikh 1. †Includes Amaris 2.
	Second "	..	..	..	..	..	..	2	2	..	..	..	12	12	..	..	..	..	..	..	14	16	
SAWAD	First wife	2	2	2	27	Includes Qureshis 2 and Pathans 2.
	Second "	..	..	..	..	..	..	..	..	..	..	..	11	11	..	..	..	..	..	..	11	11	Quite different.
	First wife	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Second "	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

SUBSIDIARY TABLE IX-C.

Relationship of husband and wife (Musalmans), Gurdaspur District.

SUBSIDIARY TABLE IX-C.																																						
Relationship of husband and wife (Musalmans), Gurdaspur District.																																						
CASTE.	DESCRIPTION OF WIVES.	NUMBER OF WIVES OF SIMILAR GOGGS WITH RELATIONSHIP.								NUMBER OF WIVES OF DIFFERENT GOGGS WITH RELATIONSHIP.								TOTAL NUMBER OF WIVES OF SIMILAR AND DIFFERENT GOGGS WITH RELATIONSHIP.												REMARKS.								
		First cousin.				Second cousin.				Second cousin once removed.				No relation.				First cousin.				Second cousin once removed.				Second cousin.					Fourth cousin once removed.				No relation.			
		3	4	5	6	7	8	Total.	9	10	11	12	13	14	15	16	17	18	19	20	21	Total.	22	23	24	25	26	27	28		Total.							
1	2																													22								
ARAIN	First wife	..	12	2	1	..	5	20	16	..	5	..	*46	*57	28	..	7	1	..	..	..	..	..	..	..	..	..	..	*51	*87* Includes Sheikh 1.
	Second "	..	..	..	..	..	1	1	1	..	..	..	5	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	6	7
GUJJAR	First wife	4	8	12	4	8	12							
	Second "	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
	Third "	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
	Fourth "	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
JAT	First wife	8	1	2	1	44	56	8	1	2	1	44	56							
	Second "	..	..	..	..	..	..	..	1	..	..	..	8	9	1	..	..	..	..	..	..	..	..	..	..	..	..	..	8	9
	Third "	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
RAJPUT	First wife	..	2	1	..	..	7	10	5	..	..	..	15	20	7	..	1	..	..	..	..	..	..	..	..	..	..	..	22	30
	Second "	..	..	..	..	..	..	..	..	..	..	..	11	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	11* Pathan 1.
SAYAD	First wife	1	1	2	3	3	1	4	5							

SUBSIDIARY TABLE IX-D.

Relationship of husband and wife (Musalmans), Delhi Province.

SUBSIDIARY TABLE IX-D.

Relationship of husband and wife (Musalmans), Delhi Province.

CASTE.	DESCRIPTION OF WIVES.	NUMBER OF WIVES OF SIMILAR <i>gotra</i> WITH RELATIONSHIP.										NUMBER OF WIVES OF DIFFERENT <i>gotra</i> WITH RELATIONSHIP.							TOTAL NUMBER OF WIVES OF SIMILAR AND DIFFERENT <i>gotras</i> WITH RELATIONSHIP.				REMARKS.		
		First cousin.					Second cousin.					Third cousin.					First cousin once removed.					Total.			
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20						
JATS	First wife	..	..	..	..	..	..	..	..	..	40	40	..	..	..	..	40	40	..	..	..	..	..	..
	Second "	..	..	..	..	..	..	..	..	..	5	5	..	..	..	..	5	5	..	..	..	..	..	..
	Third "	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..
MEWATIS	First wife	..	..	..	..	..	..	3	..	..	48	51	3	..	..	..	48	51	..	..	..	..	..	* Includes 1 Moghal.
	Second "	..	..	..	..	..	..	..	..	..	15	15	..	..	..	..	15	15	..	..	..	..	..	* " 1 Sheikh.
	Third "	..	..	..	..	..	..	..	..	..	3	3	..	..	..	..	3	3	..	..	..	..	..	* " 1 Faqir.
PATHANS	First wife	..	3	2	..	..	35	40	..	..	1	1	3	2	..	..	36	41	..	..	..	..	..	..
	Second "	..	..	..	1	9	10	..	..	..	1	1	..	..	1	..	10	11	..	..	..	..	..	* Includes 1 Sheikh.
SAYADS	First wife	..	4	2	1	2	21	30	3	12	14	14	7	4	2	2	35	50	..	..	..	..	..	* Qureshi 1. † Qureshi 1.
	Second "	..	..	..	..	4	4	..	1	..	4	5	1	..	..	..	18	19	..	..	..	..	..	† Qureshis 2. § Qureshis 7 and Pathans 2.
	Third "	..	..	..	..	..	..	1	..	..	1	2	1	..	..	..	1	2	..	..	..	..	..	* Qureshi 1. † Pathan 1 and Qureshis 3.
	Fourth "	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	* Qureshis 2. † Qureshi 1.

SUBSIDIARY TABLE X.

Authorised dates of Hindu Marriages for the Punjab, 1910-1921, as given by Pandit Devi Dial Jotshi

Number.	Year.	January.	February	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Remarks.
1	1910	30	..	4, 5, 7	..	11, 19, 20	3, 24, 25	22, 31	2, 9, 11, 27, 28	5, 6, 7, 8, 14	<p>1. Two bars over any figure denote that there are two different times for the same date at which marriages may take place.</p> <p>2. No Hindu marriage is permissible in the months of Chet, Katak and Poh, which nearly correspond to 13th March—13th April, 15th October—15th November, 15th December—15th January.</p> <p>Marriages are also prohibited during the time the planets Jupiter and Venus are invisible.</p>
2	1911	19, 20	3, 4, 15, 22, 23	3	18, 21, 30	9, 18, 24, 29	5, 20	18, 21, 22, 23, 29, 30	7, 8, 13, 24	2, 4, 5, 1, 2, 29	..	..	..
3	1912	16, 24, 25	5, 6, 7	..	20	1, 17, 18, 19, 26	..	..	17, 18, 19, 20, 23	4, 5, 12, 17, 18, 19, 20, 21	25, 26	..	..
4	1913	25, 26	14, 15	2	..	14, 20, 23, 24, 25	5, 19	12, 28, 29	4, 8	2, 4, 3	23	..	..
5	1914	..	..	..	27	12, 19, 20, 21	3, 6, 16, 17	14	23, 27, 31	1, 21, 24, 28	..	..	10
6	1915	20, 21	4, 8	..	..	16	6, 7, 22	26, 30, 31	..	..	..	23	2
7	1916	29	6, 20, 27	5	..	3, 4, 5, 26, 27	12	25	3, 21, 31	6, 1	17, 18, 20, 21	..	..
8	1917	14, 15, 27, 28	15	..	..	..	24, 28	10, 24, 28, 29	2, 6, 7, 11, 13	18, 21, 26	..	..	7, 10
9	1918	..	1	..	..	11, 17, 25	..	14	2, 7, 9, 10, 11, 13, 29	7, 9, 10	..	..	..
10	1919	21	5, 24, 25	4, 5	20, 23	19, 25, 26	6, 7, 9, 21, 22	..	14, 15, 27, 30, 31	3, 25, 1, 3, 4, 13	20, 24	7	..	
11	1920	25, 26, 27	7, 8	..	22, 23, 29	7, 14, 15, 19, 24	..	..	..	..	..	..	..
12	1921	..	..	..	..	4, 5, 9	..	..	21, 22, 26, 27	..	9, 10	16, 17, 18, 30	1

CHAPTER VIII.

Literacy.

SECTION I.—GENERAL LITERACY.

142. Reference to statistics. 143. Definition of Literacy. 144. Extent of Literacy. 145. Local distribution of Literacy. 146. Literacy by districts. 147. Literacy by Natural Divisions. 148. Literacy by cities and towns. 149. Literacy by religions. 150. Effect of the proportions of Hindus and Musalmans in the total population on the literacy of each community. 151. Literacy by castes. 152. Literacy by occupations.

SECTION II.—LITERACY AND THE STATISTICS OF THE EDUCATION DEPARTMENT.

153. Adult literacy. 154. Literacy in Schools, and extra-scholastic literacy. 155. The numbers required to replace loss of literates by death. 156. Speculative increase in male literacy in British Territory during the decade 1921-31. 157. Expansion of Education since 1901.

Section I.—General Literacy.

Reference
to Statistics.

142. The figures for education by religion and age are given in Imperial Table VIII; Part A containing the provincial summary, Part B details for districts and States and Part C details for cities and selected towns, and Imperial Table IX, which gives the details of education by certain selected castes, tribes and races. While the Imperial Tables give the absolute figures, the data giving the proportionate amount of literacy *per mille* of population are contained in the Subsidiary Tables.

Subsidiary Table I gives the literacy *per mille*, by 4 age-groups, by sex and religion for the Punjab and Delhi separately.

Subsidiary Table II gives the number of literates *per mille* by age, sex and locality for each district, State and natural division.

Subsidiary Table III gives the literacy *per mille* by religion, sex and locality for each district, State and natural division.

Subsidiary Table IV gives the same information as Subsidiary Table III for English literacy.

Subsidiary Table V gives the variation in literacy in each of the 5 censuses since 1881-1921 for males and females separately, and for the 3 age-groups 10-14, 15-19 and 20 and over for each district, State and natural division.

Subsidiary Table VI gives the number of literates *per mille* for each caste, and also literates in English per 10,000 of population.

Subsidiary Table VII shows the growth in the number of educational institutions, scholars and expenditure from 1889-90 to 1920-21, based on the returns of the Education Department, Punjab.

Definition
of Literacy.

143. The instruction contained on the cover of the enumeration book for the 1921 Census, read as follows:—

“Column 14—(Literate or illiterate)—Enter against all persons, who can both read and write any language, the word ‘literate’; against persons who cannot read and write any language make a cross in this column.”

The supplementary instructions to supervisors, given in Appendix I to the Code of Census Procedure of the Punjab 1921, read as follows:—

“Column 14—A person should not be entered as literate unless he can write a letter to a friend and read the answer to it.”

Except for verbal alterations these instructions are exactly the same as those given in 1911, and as pointed out in paragraph 413 of the last Census Report, the definition adopted in the 1911 and 1921 censuses demands a higher standard of literacy than did the instructions at the Censuses of 1881, 1891 and 1901. Comparison of the figures of literacy, therefore, between the last two Censuses of 1911 and 1921 with the literacy obtaining at any of the 3 previous censuses will be misleading. Comparison between the returns of literacy for the 1911 and 1921 Censuses will, however, be feasible, provided no insistence is made on minor differences, which may be the result of inaccurate returns.

Extent of
the Literacy.

144. Out of a total population of 25,101,060 persons in the Punjab, 967,943 persons, comprising 882,537 males and 85,406 females, were returned as literate in the present census. In the Delhi Province, out of a total of 488,188 persons, 52,458 persons, comprising 45,389 males and 7,069 females, were returned as

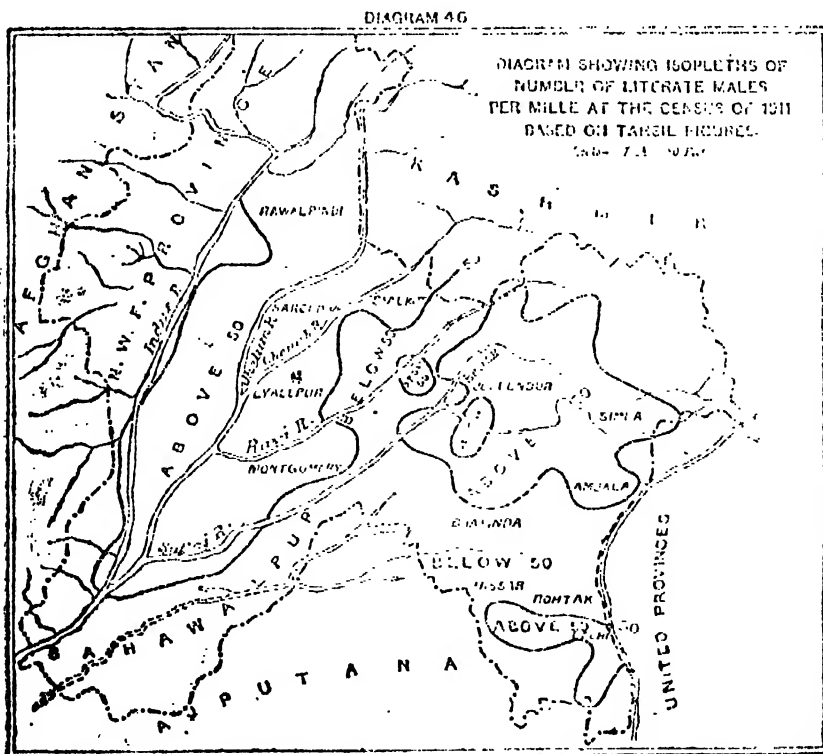
literate. Of the total population of age 5 and over, the numbers of literate persons in the Punjab were 45 *per mille*; of literate males 74 *per mille*, and of literate females 9 *per mille*: the corresponding figures for the Delhi Province were 122 *per mille* of literate persons, 180 *per mille* of literate males and 40 *per mille* of literate females. The proportion of literacy, therefore, in the Delhi Province is nearly 3 times that of the Punjab, a circumstance associated with the fact that out of a population of about 488,000 in the Delhi Province, no less than 304,000 live in Delhi City itself.

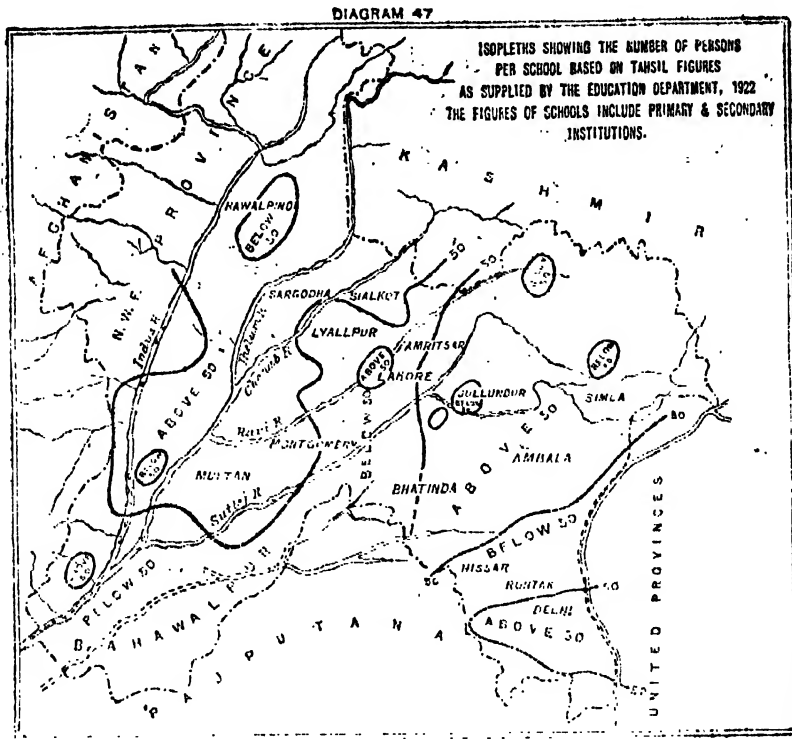
TERRITORIAL DIVISION.	LITERATE.				LITERATE IN ENGLISH.			
	1911.		1921.		1911.		1921.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
British Territory	65	6	67	8	9	1	11	1
Native States	61	3	52	4	3	..	5	..

Of the literate males in the Punjab, 16 per cent. and of literate females 14 per cent. are literate in English. In the Delhi Province, the percentage of literates in English, out of the total number of literate persons, is 31 per cent. for males and 26 per cent. for females. Comparison of the number of literates and of literates in English *per mille* for 1911 and 1921 is given in the marginal table.

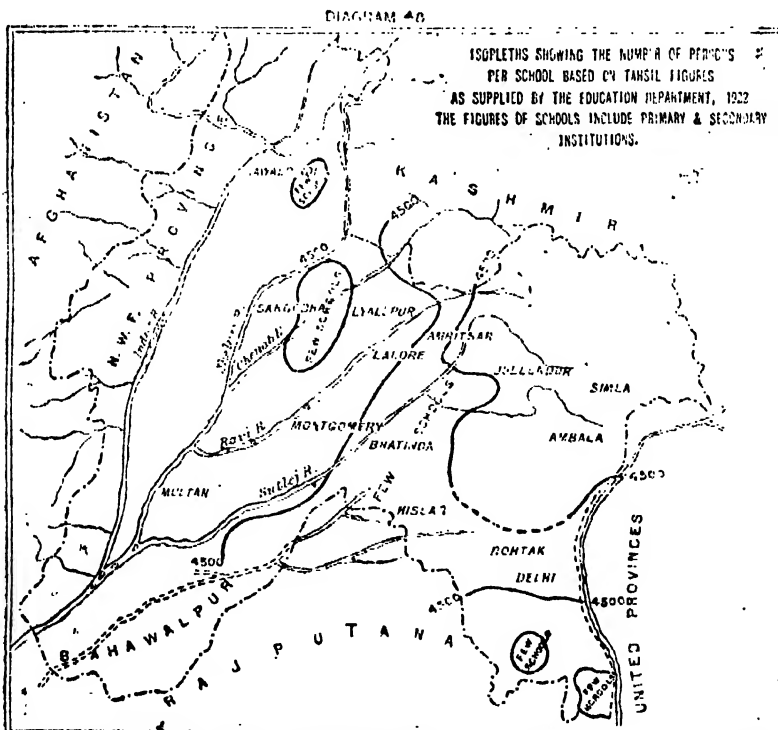
145. Diagrams 46 and 47 show the local distribution of literacy in the Punjab; the curves of these maps separating regions of literacy of below 50 *per mille* for males from regions where literacy for males exceeds 50 *per mille*. These diagrams are based on Tahsil and State figures of literacy and, therefore, most of the kinks, which it may be noticed, are very numerous in the isopleths for 1911, are representative of local variations in literacy, as indicated by the returns. Both the diagrams for 1911 and 1921 present the same general features, that is to say, that a relatively high standard of literacy obtains in a great part of the North-West of the Punjab and in its Eastern and Central regions: but between these two regions there is an unexpected strip with a low proportion of literates which covers parts of the Sialkot, Amritsar, Lahore, Sheikhupura, Ferozepore and Montgomery districts, in which literacy is below 50 *per mille*. There is another region of low literacy which is mainly comprised in the districts of Hissar, Rohtak and Karnal.

Local Distribution of Literacy.





The main features of the distribution of literacy in various tahsils of the province, as is exhibited by diagrams 46 and 47, are readily explicable by reference to a map of the Punjab showing the parts of the Province in which there are few or many schools per head of population. A diagram (No. 48) showing the population served by each school has been drawn and is reproduced below—

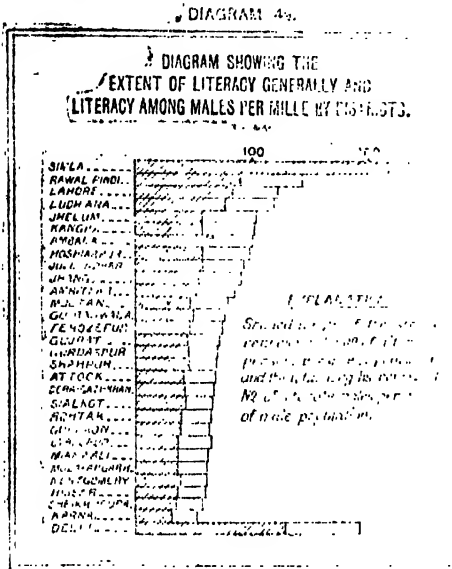


It will be observed that the area in which there are more than 4,500 persons per school in the centre of the Punjab corresponds fairly closely with the area in diagram 47 in which the literacy falls below 50 *per mille*. Similarly, there are more than 5,500 persons per school in the Bhiwani tahsil, included in the area of low literacy which sweeps across Hissar and Rohtak: but, conversely, although there are few schools in the tahsils of Bhalwal, Phalia, Hafizabad and

Chiniot, this is an area in which literacy exceeds 50 *per mille*. Naturally the mere number of schools in any tahsil is not an exact index of the number of literates to be expected in the general population, and on the whole it is surprising to find such a close correspondence between the two sets of figures as is exhibited by diagrams 47 and 48. The figures for the number of schools are those supplied to me by the courtesy of Mr. G. Anderson, Director of Public Instruction, Punjab, and apply to the year 1921-22.

146. The diagram given in the margin shows the extent of literacy generally, and of literacy among males *per mille* by districts, the falling away of the curves for male literacy and for literacy generally being roughly concurrent, as might be expected in view of the fact that male literacy is over 8 times the extent of female literacy.

Literacy by Districts.

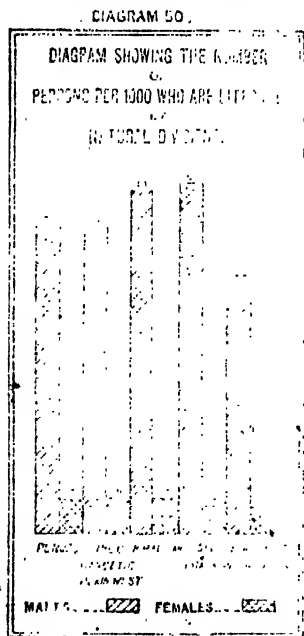


The extent of literacy in the first 3 districts, namely, Simla, males 211 and females 156 *per mille*; Rawalpindi, males 120 and females 19 *per mille*; and Lahore, 100 *per mille* for males and 23 *per mille* for females, is due to exceptional circumstances. Simla contains a very large proportion of Europeans and educated Indians, Rawalpindi has a very large Cantonment, and Lahore is the educational centre of the Punjab. Karnal, Sheikhupura and Hissar are the most backward districts

in the Punjab, Sheikhupura being but a newly created district, and Hissar and Karnal remote from the capital of the province. Lyallpur with 52 males and 6 literate females *per mille* is strikingly backward in spite of the fact that it fairly bristles with schools except in the Chiniot Tahsil.

147. The diagram given in the margin shows the proportionate literacy for males and females by natural divisions, the Sub-Himalayan Area coming first, and the North-West Dry Area last in the proportion of literates, both male and female. It would be a far cry to correlate the extent of literacy with geological formation or climatic conditions. No diagram is given to indicate the extent of English literacy by natural divisions, and the following observations must suffice. Among males the Sub-Himalayan tract with 155 literates per 10,000 comes first. The Indo-Gangetic Plain with 128 literate males, the Himalayan with 85 literate males, and the North-West Dry Area with 70 literate males per 10,000 follow in the order named. As regards females the Himalayan Area with 26 per 10,000 comes first, closely followed by the Indo-Gangetic Plain with 25 per 10,000. The Sub-Himalayan Area comes next with 16 literate females per 10,000 and the North-West Dry Area is the last with only 1 females literate in English per 10,000 of population.

Literacy by Natural Divisions.



Natural Division.	Number of literate males per 10,000 for ages 5 and over.	Number of literate females per 10,000 for ages 5 and over.
Sub-Himalayan	155	16
Indo-Gangetic Plain	128	25
Himalayan	85	26
North-West Dry Area	70	1

The marginal table will show that the extent of English male literacy is largely dependent on the presence or absence of Cantonments which usually contain a considerable number of European troops.

Literacy by
Cities and
Towns.

148. The marginal table shows the literates *per mille* for certain cities

City or Town.	LITERATE <i>per mille</i> .	
	Males.	Females.
Ambala	275	62
Ferozepore	248	78
Lahore	244	97
Sialkot	234	59
Jullundur	223	63
Delhi	208	49
Rawalpindi	199	87
Amritsar	158	18
Mut'an	114	31

and selected towns. As compared with 66 literate males and 8 literate females in the province as a whole, the 8 cities and selected towns of the Punjab provide us with 213 literate males and 64 literate females *per mille* and this is an indication of the greater extent of literacy which obtains in urban as compared with rural areas. The reasons for this need no elaboration.

Literacy by
Religions.

149. The marginal table gives the number of literates by religion and sex

Religion.	1911.		1921.	
	Males.	Females.	Males.	Females.
All religions	63	8	74	9
Hindus	95	7	113	18
Sikhs	94	12	93	13
Jains	464	24	506	47
Musalman	27	2	37	4
Christians	235	125	140	93

per mille at the Censuses of 1911 and 1921. Hindu, Musalman, and Jain religions show an increase in literacy both male and female, while a decrease is exhibited by the Christian religion: Sikhs have remained almost exactly in the same state of literacy as they were in 1911. The decrease of literacy among Christians is undoubtedly due to the inclusion among

their number of a large proportion of converted low-caste Hindus and Musalmans. The greatest relative advance is that made by the Musalman community, but it is still very backward in education, and will have to make up a great deal of leeway before it approaches the standard of literacy among Hindus. The educational stagnation of the Sikhs is possibly due to a real increase in literacy combined with a diminution arising from the conversion of the comparatively illiterate Mazhabi to the ranks of Sikhism. However this may be, the fact remains that Sikhs, who were equal to Hindus in literacy in 1911, have now fallen some way behind them. Another factor in the situation is possibly the fact that a knowledge of Gurmukhi is not a key to any Government appointment in the same way as the Urdu language is, and this may to some extent explain the growing neglect of the national language of the Sikhs. From among Christians, Europeans are almost universally literate, the numbers being 905 *per mille* for males and 933 *per mille* for females, for ages 5 and over, while among Indian Christians the corresponding numbers are only 46 and 34 *per mille*. Among the religious communities which only supply a very small fraction to the total population of the province, namely, the Parsi, the Jew and the Buddhist, a very high standard of literacy prevails. Parsis have 723 literate males *per mille*, and 746 literate females *per mille*. Jews have 273 males and 286 females *per mille*, and Buddhists 206 literate males and 18 literate females *per mille*. The 3 communities, the European Christian, Parsi and Jewish differ from all the other religious communities of the province in possessing a greater proportion of literate females than literate males.

Effect of
the propor-
tions of
Hindus and
Musalmans
in the total
population
on the liter-
acy of each
community.

150. A very striking relationship between the percentage of Hindus in the various districts of the province and the percentage of literacy among Hindus may be noticed.* The association is this: As the percentage of Hindus in the total population diminishes in going from one district to another so the percentage of literacy among Hindus increases, although the increase of literacy does not bear a linear relationship to the diminution of the percentage of Hindus in the total population. Thus in every district in which the percentage of Hindus lies between 60 and 100 the percentage of literacy is about 5 or 6; but in districts with less than 10 per cent. of Hindus the percentage of literacy among Hindus is over 25 per cent.

The most probable explanation of this, suggested by Sheikh Abdul Majid, my Personal Assistant, is that in those districts in which there is a large proportion of Hindus, most of them will be found to be engaged in agriculture, whereas in the districts with relatively few Hindus most of them will be engaged in trades or professions. For Musalmans a similar relationship obtains, that is to say, the proportion of literate Musalmans is greater in those districts where there

(*My attention was drawn to this fact by Mr. Abdul Majid, M. A., my Head Computer.)

are few of them than in districts where there are relatively more Musalmans: but the percentage of literacy among Musalmans does not rise above 10, even in those districts where there are less than 5 per cent. of Musalmans. Considerations of time and economy prevent the reproduction of the very interesting diagrams which illustrate the foregoing argument.

151. The absolute figures of literacy by caste are given in Imperial Table IX, while the proportions per 1,000 of literates, and per 10,000 for literates in English are given in Subsidiary Table VI for 1911 and 1921. Imperial Table IX is particularly useful because it differentiates Hindus, Sikhs, Musalmans and Jains in each caste; the absence of this differentiation in some of the caste tables is a fruitful source of errors of interpretation, as there are so few castes, especially among predominantly Hindu and Sikh castes, which do not contain a large proportion of persons belonging to other religious communities.*

The castes which show the highest proportion of literates are shown in the

Caste.	1921.	1911.	Caste.	1921.	1911.
Khatri ..	231	250	Sheikh ..	87	74
Aggarwal ..	209	212	Sunar ..	82	80
Arora ..	172	210	Khoja ..	57	58
Brahman ..	122	113	Pathan ..	57	53
Sayad ..	97	83	Moghal ..	53	49
Qureshi ..	92	77			

margin. It will be noticed, that there has not been much change in the relative position of the castes since 1911, the predominantly Hindu castes being far superior in literacy to the Musalmans. The castes

with a proportion of less than 10 per mille of literates for 1921 are as follows:—

Bawaria ..	2	Dogar ..	6	Malliar ..	6
Bharai ..	6	Dumna ..	5	Mallah ..	5
Baloch ..	9	Harni ..	3	Meo ..	6
Chamar ..	5	Kumhar ..	5	Mochi ..	6
Chuhra ..	2	Machhi ..	4	Mussalli ..	1
Dagi and Koli ..	5	Mahtam ..	4	Teli ..	7
Dhanak ..	2	Mali ..	6		

These castes are nearly all low in the social scale, and are engaged in menial occupations or crime. The castes which show a relatively large proportion of female literates are the Khatri (60), Arora (29), Sheikh (25), Sayad (23) and Qureshi (22).

152. The figures of literacy by occupation for the Censuses of 1891, 1911 and 1921 are given in the table noted below—

NUMBER OF LITERATES PER 1,000.

Serial No.	Caste.	1891	1911	1921	Serial No.	Caste.	1891	1911	1921
I	AGRICULTURE ..	14	19	23	V	ARTISANS ..	20	26	26
1	Arain ..	7	11	17	1	Chhimba ..	19	28	33
2	Awan ..	14	13	20	2	Kashmiri ..	17	34	30
3	Ghirath ..	8	11	16	3	Lohar ..	11	11	17
4	Jat ..	13	17	19	4	Nai ..	10	13	16
5	Kamboh ..	12	16	15	5	Sunar ..	76	80	82
6	Labana ..	10	23	30	6	Tarkhan ..	15	23	23
7	Moghal ..	30	49	53	VI	CRIMINAL TRIBES ..	2	3	3
8	Pathan ..	41	53	57	1	Bawaria ..	2	4	2
9	Rajput ..	12	26	33	2	Harni ..	2	3	3
10	Saini ..	15	26	35	3	Pakhiwara ..	..	3	17
II	PRIESTS AND DEVOTEES ..	97	107	117	VII	OTHERS ..	7	10	13
1	Brahman ..	102	113	122	1	Barwala ..	5	7	11
2	Sayad ..	71	83	97	2	Bharai ..	2	4	6
III	HUNTERS (MAHTAM) ..	4	9	4	3	Jhiwar ..	6	11	12
IV	TRADERS ..	173	191	177	4	Jogi-Rawal ..	17	24	13
1	Arora ..	203	210	172					
2	Khatri ..	218	250	231					
3	Sheikh ..	62	74	87					

and it indicates that the greatest advance in literacy in the last 40 years has been made by agriculturists; artisans come next.

Section II.—Literacy and the Statistics of the Education Department.

153. A boy or girl at school, even when literate, is only potentially important: so the value of any system of education is to be tested by the efficiency of

Adult Literacy.

*Among Sikhs practically the only important caste which is composed almost exclusively of Sikhs, is the Ramgarhia, and even in this there are a certain number of Hindus: these have recently been claiming to be excluded from the caste on the ground that they are really Dhiman Brahmans. The matter is dealt with in Chapter .XJ

the adult members of the Community. If, therefore, literacy in the census meaning of the word and social efficiency are correlative, the Punjab has bettered itself but slightly during the last decade. In 1911 from among 7,038,795 males over the age of 20 in the Punjab and Delhi 665,453 were literate. In 1921 out of 7,308,792 males over 20 in the Punjab and Delhi 705,683 were literate. Thus literacy among adult males rose from 9.45 to 9.65 per cent. during the decade. The difference between these two figures, 0.20 per cent., is less than twice the probable error of the difference, namely, 0.135,* so that however much we may expect adult literacy to have increased in the 10 years between 1911 and 1921, we are not justified in concluding that it has done so, except for reasons other than those based on the census returns.†

Literacy
in Schools
and extra-
Scholastic
Literacy.

154. It is desirable to examine the figures for literacy in schools, both in order to determine the extent of extra-scholastic literacy, and also with a view to estimating the likelihood of the extension of literacy in the Province and of the proportion of adult literates which is likely to result in future years from a given yearly outturn of literate scholars by the Education Department.‡ Though there is not complete unanimity, the consensus of opinion in the Department is in favour of treating one-third of the 4th Primary and all of the 5th Primary classes in 1911 as literate; while in 1921, when the old 5th class had ceased to be a Primary class, two-thirds of the 4th Primary class are to be regarded as literate. We obtain then the following estimate of the number of literate persons (males and females) in Departmental Schools.

	1910-11.	1920-21.
Fraction of IV Primary scholars; $\frac{1}{3}$ in 1911; $\frac{2}{3}$ in 1921	33,000	30,976
Scholars in classes above IV Primary in schools and colleges	42,402	99,431
Total literate scholars	75,402	130,407
Literates under 20 years old according to Census (British Territory, including Delhi Province in 1911 excluding Delhi in 1921)	174,684	220,610
Extra-scholastic literates, below 20	99,282	80,233
Literates in British Territories	774,845	838,492
Extra-scholastic literates of all ages	699,143	703,085

Literate Males over 20 for the Punjab and Delhi.

	1911.	1921.
Punjab	665,453	670,000
Delhi		35,683
Total	665,453	705,683

Total Males over 20 for the Punjab and Delhi.

Punjab	7,038,795	7,144,121
Delhi		164,668
Total	7,038,795	7,308,792

Thus while extra-scholastic literates below 20 have decreased by 19,000 persons, consequent on the closing down of many private educational institutions during the decade, there has been a very slight increase in the numbers of extra-scholastic literates of all ages. The results suggest that the efforts of the Department of Education to increase the literacy of the Province have been almost completely nullified by the diminution in private educational enterprise. It is not surprising, therefore, to find that "effective" male literacy, which we may regard as a touchstone of the utilitarian value of education has advanced only from 9.45 to 9.65 per cent. for the whole of the Punjab and Delhi. The relevant figures are noted in the margin.

The numbers required to replace loss of literates by death.

155. Taking the figures of Life Table P for the Punjab, for males, as given in the Actuarial Report on page 187 of Volume I, Chapter V of the Census of India Report for 1911, we see that out of a population of 2,122,761 males, 41,738 enter their 20th year of age each year: so that by a simple sum in proportion we find that out of 11,306,265 males in British Territory in 1921, 222,305 males will attain their 20th birth-day each year.

* Assuming that the probable error of the returns for the percentage of literates is 1 per cent. for either census, the probable error of the difference of two figures of 9.5 per cent. is $\sqrt{2} \times 0.095 = 0.135$. The assumption of a probable error of 1 per cent. does not seem excessive in view of the vagueness of the test question, apart from the errors arising from complete omissions.

† Of literates over 20 a small population will be scholars and collegians, and these might be excluded in estimating the number of adult literates who are "effectives" so far as the community is concerned. From the very interesting "Report on the Progress of Education in the Punjab during the quinquennium ending 1921-22" it may be found (vide General Table X, pages LII and LIII) that there were 3,272 pupils over 20 in schools and Arts Colleges. Of these 277 were in the Primary classes, leaving almost exactly 3,000 literate scholars over 20.

‡ I must make acknowledgment of the great courtesy and assistance received from Mr. G. Anderson, Director of Education, Mr. Tydeman, Mr. Maqbul Shah and other Officers of the Department, both in supplying me with the necessary statistics and in discussing their bearing on the census figure literacy.

This is equivalent, in a "stationary" population, to saying that 222,305 males over the age of 20 die each year. Now the proportion of literate males over 20 to the total number of males over 20 is for British Territory, 1 to 10·311, so that assuming there is no differential death-rate adverse or favourable to literate males as contrasted with illiterate males, the number of literate males over 20 who die each year is 21,560.

Roughly speaking then, British Territory in the Punjab will require 22,000 literate males of the age of 20 to be turned out each year, in order to maintain the present standard of 9·7 per cent. of male literates over the age of 20.

In order to maintain a standard of 20 per cent. of literates among males over twenty years of age, it would be necessary to turn out about 45 thousand literate males each year. As the Education Department actually produces 47,000* literate males each year, it would, if its efforts are maintained *pro rata* with the increase in population,† secure the eventual attainment of 20 per cent. of male literacy in British Territory in the Province, provided that relapses into illiteracy are not too common. As some educational authorities admit, there is a great proportion of boys who have passed through the primary schools, who are scarcely literate at the moment of their leaving school; these must relapse into illiteracy in a very short time. Some quotations from the admirable "Report on the Progress of Education in the Punjab during the Quinquennium ending 1921-22" may be permitted. The Inspector of Schools, Ambala Division, writes—

"The boy that passes out of the present day Primary school can hardly be termed literate. He is not even able to carry on correspondence with ease. The parent in the village finds that his boy has gained no accomplishment worth having as a result of four years' or even longer stay at school."

Sardar Bishen Singh writes—

"The existing curriculum, overburdened as it is,..... This coupled with the four class school, has made the boy more liable to relapse into illiteracy."

It seems probable, therefore, that even when the Department is in a position to turn out 60,000 literate boys per annum, the percentage of relapse will always be high. In the argument that follows we will assume that the Education Department is only able to produce 50,000 males of the age of 20 who will be permanently literate.

156. It is perhaps worth while to hazard an estimate of the increase

	Survival rate.	Survivors.
1921	0·794	39,700
1922	0·815	40,700
1923	0·835	41,700
1924	0·856	42,800
1925	0·877	43,800
1926	0·898	44,900
1927	0·918	45,900
1928	0·939	46,900
1929	0·959	47,900
1930	0·980	49,000
		443,300

in literacy among males over 20 in British Territory, on the assumption of the production of 50,000 stably literate males annually during the next decade. The figures in the margin show the numbers of the literate males of 20 years of age produced year by year who will be alive in 1931.

To this number 443,300, have to be added the survivors in 1931 of the existing male literates of 20 years age and over; these now number 566,323. Adopting the figures of Life Table P we find that a proportion of 0·656 of them will be alive in 1931. This gives 371,508

Speculative
increase in
male literacy
in British
Territory dur-
ing the de-
cade 1921-31.

survivors of males who were literate prior to 1921, and the total number of male literates over 20 in British Territory will be constituted as follows:—

Survivors in 1931 of male literates over 20 in 1921 .. 371,508

*Literates produced during the decade 1921-1930
and alive in 1931.* 443,300

Total 814,808

Assuming an increase of population at the rate of 5·5 per cent. during the decade the number of males above 20 in 1931 will be 6,161,000, so that

*This is the number of students in the 4th Primary class according to General Table X, page LII of the Report on the Progress of Education in the Punjab for 1920-21. Mr. Anderson, the Director of Education, informs me that his Department expects to turn out an average of 60,000 literates annually during the next decade.

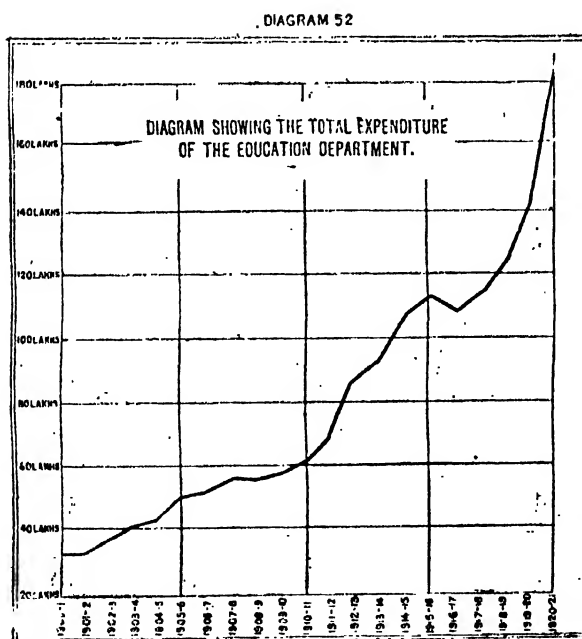
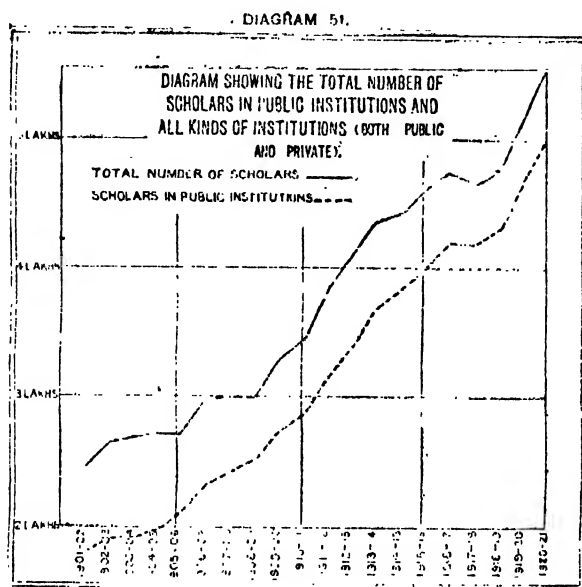
†The present annual increment of population is about 0·55 per cent.

the percentage of male literacy for males over 20 years of age in British Territory will be then 13·2 per cent., as compared with a figure of 9·7 per cent. in 1921.

Too many assumptions are involved to make this prediction of any great certainty, but it does at least afford guidance as to the probable increase of literacy during the next decade consequent on a given educational policy. In particular, if in future years there are less than the assumed annual number of relapses into illiteracy of 10,000 per annum, or a greater outturn of initially literate persons the resultant literacy at the Census of 1931 will be in excess of the 13·2 per cent. calculated above, and *vice versa*.*

Expansion
of Educa-
tion since
1901.

157. I close the chapter by giving two diagrams, which illustrate the growth of the number of scholars and in the expenditure of the Education Department during the last 20 years. Before attempting to discuss the relative increase of expenditure and of the number of scholars, it would be necessary to correct the former figures for the change in the purchasing power of the rupee, and thus the enquiry would lead us too far afield to be pursued any further here. Mention may however be made of the calculation by the present writer of an index number of prices based on the Lahore wholesale prices of 24 leading commodities which shows that prices have increased from 100 in the year 1910-14 to 202 in 1921. Since then there has been a marked fall in prices, but even so, more must not be expected from an expenditure of three rupees at the present time than from two rupees before the war. While therefore expenditure on Education expressed in rupees has trebled in the 10 years 1910-11 to 1920-21, the effective expenditure expressed in purchasing power is now probably only about double what it was 10 years ago. Progress during the next decade will indicate to what extent



the community is getting a return for its increasing outlay.

*The numerical dependence of the amount of literacy on the number of scholars is exhibited by a correlation co-efficient of 0·507, obtaining between the ratio of male scholars to male population between 5-15 years and the number of literate males *per mille* of males for each Punjab district.

The co-efficients of variation from district to district of the ratio of scholars to population, and of the *per mille* number of literate males, are almost exactly the same, being 28·3 and 27·4 per cent. respectively.

I. Literacy by age, sex and religion (Punjab and Delhi). II. Literacy by age, sex and locality. III. Literacy by religion, sex and locality. IV. English literacy by age, sex and locality. V. Progress of education since 1881. VI. Literacy by caste (Punjab and Delhi). VII. Showing the growth in the number of educational institutions, scholars and expenditure from 1889-90 to 1920-21 from the returns of the Education Department, Punjab.

SUBSIDIARY TABLE I.

Literacy by age, sex and religion.

RELIGION.	NUMBER per mille WHO ARE LITERATE.											NUMBER per mille 5 AND OVER WHO ARE LITERATE IN ENGLISH.		
	All ages 5 and over.			5-9 (inclusive).		10-14 (inclusive).		15-19 (inclusive).		20 and over.		Total.	Males.	Females.
	Total.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.			
PUNJAB.	1	3	4	5	6	7	8	9	10	11	12	13	14	15
ALL RELIGIONS..	45	74	9	6	2	53	12	96	17	94	9	7	12	1
Hindu ..	68	113	11	9	3	82	15	144	21	142	10	9	16	1
Musalman ..	22	37	4	3	1	29	5	52	8	48	4	3	6	..
Christian ..	120	110	93	32	44	73	105	144	119	189	103	96	116	69
.. (European, etc.) ..	914	905	933	Not available.								862	888	822
.. (Indian) ..	40	46	34									19	22	16
Buddhist ..	113	206	18	..	..	53	..	140	16	271	23	8	15	..
Jain ..	296	506	47	34	15	334	76	567	73	653	41	30	55	1
Sikh ..	59	93	13	5	2	69	19	116	27	117	13	7	11	..
Parsi ..	732	723	746	474	273	643	720	613	750	766	831	580	623	513
Jew ..	278	273	286	..	..	..	..	..	..	376	500	222	273	143
DELHI.														
ALL RELIGIONS ..	122	180	40	32	21	122	41	190	55	217	42	37	57	10
Hindu ..	99	150	21	22	11	114	30	176	38	177	27	26	43	2
Musalman ..	120	182	31	29	10	110	37	176	48	227	32	23	39	2
Christian ..	501	560	411	254	375	271	333	478	398	644	436	418	491	306
.. (European, etc.) ..	843	806	969	Not available								843	806	969
.. (Indian) ..	287	324	249									152	188	115
Buddhist ..	1,000	1,000	1,000	..	1,000	..	..	1,000	..	1,000	1,000	333	333	333
Jain ..	466	699	162	193	4	584	92	753	254	798	191	82	139	9
Sikh ..	517	616	247	273	176	333	271	538	418	684	229	155	195	47
Parsi ..	855	833	905	286	..	1,000	750	666	1,000	943	1,000	652	667	619
Jew ..	412	506	364	..	..	..	..	..	500	1,000	500	353	500	273

SUBSIDIARY TABLE II.

Literacy by age, sex and locality.

DISTRICT OR STATE AND NATURAL DIVISION.	NUMBER per mille WHO ARE LITERATE.										
	All ages 5 and over.			5-9 (inclusive).		10-14 (inclusive).		15-19 (inclusive).		20 and over.	
	Persons.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12
PUNJAB	45	74	9	6	2	53	12	96	17	94	9
I.—INDO-GANGETIC PLAIN WEST	45	74	9	5	2	51	12	92	17	94	9
1. Hissar	32	57	3	3	1	33	3	76	6	77	3
2. Loharu State	9	14	2	9	..	14	6	18	4	15	2
3. Rohtak	35	61	3	4	1	48	3	78	5	79	4
4. Dujana State	20	38	1	..	..	13	..	51	2	53	1
5. Gurgaon	35	61	4	5	1	45	4	69	7	80	4
6. Patwadi State	38	68	3	2	1	45	2	55	9	94	3
7. Karnal	28	48	4	3	1	25	4	55	6	65	4
8. Jullundur	54	87	13	..	..	87	20	137	28	101	12
9. Kapurthala State	40	67	7	..	..	56	9	87	12	83	8
10. Ludhiana	72	113	18	..	..	116	34	160	38	134	17
11. Malerkotla State	46	75	5	..	..	53	7	77	6	95	6
12. Ferozepore	43	70	9	..	..	48	13	92	19	93	9
13. Faridkot State	41	69	4	..	..	25	3	77	10	99	5
14. Patiala State	42	69	5	4	1	35	5	71	10	94	6
15. Jind State	32	53	4	4	1	27	4	65	8	72	5
16. Nabha State	39	66	4	4	..	31	4	64	8	88	5
17. Lahore	79	115	28	21	13	81	36	148	49	139	27
18. Amritsar	49	79	9	..	..	50	15	93	17	105	10
19. Gujranwala	46	71	14	15	7	62	19	98	27	82	13
20. Sheikhupura	33	53	5	5	1	30	6	62	12	72	5
II.—HIMALAYAN	47	83	9	9	3	56	11	92	12	104	8
21. Nahan State	32	54	5	4	2	24	6	44	8	72	4
22. Simla	207	222	175	66	126	244	244	255	242	227	162
23. Simla Hill States	34	62	3	3	1	30	3	63	7	80	4
24. Bilaspur State	39	69	3	6	..	34	2	68	4	89	3
25. Kangra	53	97	6	13	3	73	16	117	11	120	6
26. Mandi State	47	86	4	..	..	51	6	80	4	117	4
27. Suket State	30	53	3	7	..	27	4	42	8	69	3
28. Chamba State	26	46	3	3	1	25	3	39	3	59	3
III.—SUB-HIMALAYAN	51	85	11	6	3	70	14	117	20	103	11
29. Ambala	61	95	16	11	10	71	20	114	27	117	16
30. Kalua State	39	65	5	2	1	38	4	74	6	84	6
31. Hoshiarpur	51	93	8	..	..	95	12	144	17	108	8
32. Gurdaspur	42	67	9	1	..	64	14	98	20	81	9
33. Sialkot	39	64	9	8	3	54	13	99	19	76	8
34. Gujrat	41	69	8	8	2	59	10	96	15	85	8
35. Jhelum	54	98	9	6	1	86	14	153	23	122	9
36. Rawalpindi	85	136	22	18	10	92	28	176	35	169	23
37. Attock	37	66	7	5	2	46	8	81	12	89	7
IV.—NORTH-WEST DRY AREA	37	62	7	6	2	41	9	85	13	81	7
38. Montgomery	36	59	7	4	2	33	8	70	15	82	7
39. Shahpur	42	67	12	8	4	51	17	91	23	85	12
40. Mianwali	33	60	2	3	1	35	2	73	5	83	2
41. Lyallpur	37	61	7	6	2	49	9	96	12	76	7
42. Jhang	50	85	9	7	3	53	12	113	19	114	9
43. Multan	44	72	8	8	3	45	10	95	15	95	8
44. Bahawalpur State	18	31	2	3	1	17	2	40	3	42	2
45. Muzaffargarh	34	59	5	5	2	36	5	83	8	78	4
46. Dera Ghazi Khan	38	65	5	6	1	41	10	98	10	85	4
Cities	164	220	70	60	37	180	103	274	126	243	64
Selected Towns	189	254	80	49	28	237	112	316	127	278	79
Total Cities and selected Towns	175	234	74	56	33	204	107	291	126	257	70
DELHI	122	180	40	32	21	122	41	190	55	217	42
I.—INDO-GANGETIC PLAIN WEST	122	180	40	32	21	122	41	190	55	217	42
1. Delhi	122	190	40	32	21	122	41	190	55	217	42
Delhi City	161	228	57	52	32	159	62	235	78	266	59

SUBSIDIARY TABLE III.

Literacy by religion, sex and locality.

District or State and Natural Division.				NUMBER per mille who are LITERATE.									
				Hindu.		Musalman.		Christian.		Jain.		Sikh.	
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
PUNJAB	1	2	3	113	11	37	5	140	93	506	47	93	11
INDO-GANGETIC PLAIN WEST		97	9	64	3	44	7	119	84	487	39	72	9
1. Hisar		64	3	27	2	236	226	176	35	51	3		
2. Loharu State		7	1	59	13			556					
3. Rohtak		59	3	50	4	31	14	505	28	147	75		
4. Dujana State		28	1	75	1								
5. Gurgaon		71	3	33	2	266	187	529	46	177	23		
6. Patnaudi State		63	3	72	3	620							
7. Karnal		50	3	36	4	60	51	424	17	72	9		
8. Jullundur		133	19	59	10	312	154	593	130	74	7		
9. Kapurthala State		139	16	38	4	47	52	592	63	70	7		
10. Ludhiana		191	24	60	13	415	433	521	39	103	16		
11. Malerkotla State		109	7	62	6	278	267	452	71	33	1		
12. Ferozepore		125	15	32	5	382	161	517	102	65	7		
13. Firozkot State		131	7	26	2	145	167	671	40	57	4		
14. Patiala State		98	5	39	4	288	280	484	20	51	6		
15. Jind State		18	2	43	1	269	266	392	28	87	16		
16. Nabha State		83	3	32	4	95	167	636	43	56	6		
17. Lahore		215	56	71	15	171	126	536	78	89	13		
18. Amritsar		141	12	43	4	103	95	461	63	82	11		
19. Gujranwala		207	39	33	7	22	15	339	48	136	30		
20. Sheikhupura		127	9	28	2	27	31	605		80	8		
HIMALAYAN		80	5	87	11	771	887	650	114	256	37		
21. Nahan State		53	4	64	10	650	756	576	250	96	8		
22. Simla		154	41	250	87	795	941	881	316	498	216		
23. Simla Hill States		60	3	66	5	729	468	680		120	5		
24. Bilaspur State		69	3	40		1,000	1,000			223	12		
25. Kangra		97	6	64	9	573	515	38	83	293	41		
26. Mandi State		86	4	70	6	1,000	1,000			338	19		
27. Suket State		52	3	59						417			
28. Chamba State		45	2	52	5	656	417	1,000		297	95		
SUB-HIMALAYAN		131	15	46	4	180	102	579	80	150	24		
29. Ambala		91	9	69	10	703	796	640	117	112	12		
30. Kalsia State		76	3	36	3			550	71	84	16		
31. Hoshiarpur		106	9	55	5	84	59	561	78	118	10		
32. Gurdaspur		108	12	48	7	32	31			56	8		
33. Sialkot		105	12	41	5	76	24	544	59	89	15		
34. Gujrat		269	32	31	3	102	98	1,000	1,000	323	41		
35. Jhelum		413	62	54	2	596	486	432	22	449	79		
36. Rawalpindi		359	77	62	3	757	675	568	58	438	119		
37. Attock		403	64	30	1	828	616	1,000		413	54		
NORTH-WEST DRY AREA		235	24	24	3	79	31	585	91	130	22		
38. Montgomery		194	25	22	2	45	30	600		118	14		
39. Shahpur		269	50	28	2	28	18	1,000		279	100		
40. Mianwali		273	11	22		690	700			344	23		
41. Lyallpur		137	19	31	3	18	7	669	18	85	9		
42. Jhang		412	39	24	2	165	65	1,000	333	464	68		
43. Multan		279	22	24	3	431	182	462	250	262	38		
44. Bahawalpur State		105	5	17	1	686	633			38	3		
45. Muzaffargarh		312	17	22	2	779	127	500		122	23		
46. Dera Ghazi Khan		378	30	25	1	600	438	496	95	188	41		
Cities		270	81	142	39	650	513	392	62	326	76		
Selected Towns		330	85	146	38	470	155	593	97	386	191		
Total Cities and Selected Towns		299	83	144	39	541	184	546	88	351	115		
DELHI		150	26	182	31	580	411	699	162	616	247		
INDO-GANGETIC PLAIN WEST		150	26	182	31	580	411	699	162	616	247		
1. Delhi		150	26	182	31	580	411	699	162	616	247		
Delhi City		194	36	209	37	753	663	723	194	616	247		

NOTE.—The figures in this table are for persons of 5 years of age and over only.

SUBSIDIARY TABLE IV.

English literacy by age, sex and locality.

DISTRICT OR STATE AND NATURAL DIVISION.	LITERATE IN ENGLISH PER 10,000.															
	1921.								ALL AGES 5 AND OVER.							
	5-9 (inclusive).		10-14 (inclusive).		15-19 (inclusive).		20 and over.		1921.		1911.		1901.		1891.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PUNJAB AND DELHI ..	6	5	82	13	258	21	149	16	127	14	92	12	71	7	34	5
PUNJAB ..	6	4	79	12	249	19	137	14	118	12	..	..	..	..	..	..
INDO-GANGETIC PLAIN WEST (TOTAL) ..	6	4	88	13	273	24	177	19	147	16	104	13	75	7	30	5
INDO-GANGETIC PLAIN WEST ..	4	2	81	12	254	20	154	14	128	25	..	..	..	..	..	..
1. Hissar ..	2	..	25	1	82	6	56	4	44	3	32	3	31	3	10	2
2. <i>Loharu State</i> ..	12	..	14	20	47	..	11	..	14	2	15	..	12	..	2	..
3. Rohitak ..	..	..	39	2	117	2	60	3	53	3	34	1	28	1	6	..
4. <i>Dujana State</i> ..	..	..	6	..	35	..	30	..	21	..	30	..	23	..	5	..
5. Gurgaon ..	..	..	39	1	88	3	58	7	48	3	30	3	29	2	9	1
6. <i>Palauli State</i> ..	..	..	..	..	34	..	39	..	26	..	43	1	12	..	38	..
7. Karnal ..	1	..	35	1	108	3	58	3	50	2	33	2	44	2	10	1
8. Jullundur ..	1	1	134	14	468	26	174	13	170	12	96	8	82	5	43	5
9. <i>Kapurthala State</i> ..	..	..	76	7	234	8	112	7	103	6	76	3	17	1	13	..
10. Ludhiana ..	..	..	155	8	480	30	161	18	167	17	120	11	61	4	15	1
11. <i>Malerkolla State</i> ..	..	..	91	3	234	..	228	6	181	4	58	8	25	3	10	1
12. Ferozepore ..	..	..	74	18	235	31	124	11	107	12	85	8	63	3	43	5
13. <i>Faridkot State</i> ..	..	..	5	..	75	4	59	2	43	1	33	..	14	1	10	..
14. <i>Patiala State</i> ..	2	1	39	2	116	5	83	5	67	4	52	3	65	3	7	1
15. <i>Jind State</i> ..	2	1	53	4	158	7	78	9	70	6	37	7	24	4	3	..
16. <i>Nabha State</i> ..	..	..	17	..	46	4	59	1	43	1	17	1	15	..	6	..
17. Lahore ..	34	10	249	64	718	100	545	74	459	66	374	82	219	35	125	26
18. Amritsar ..	..	..	53	13	321	13	186	13	148	11	116	12	74	9	23	4
19. Gujranwala ..	6	6	153	19	327	27	133	12	136	14	73	2	66	3	17	2
20. Sheikhupura ..	2	..	28	1	55	6	69	4	50	3	..	..	..	..	..	..
HIMALAYAN ..	11	19	66	35	160	32	96	25	85	26	58	24	48	16	31	11
21. <i>Nahan State</i> ..	2	2	36	2	95	3	62	7	54	4	42	5	29	3	15	1
22. Simla ..	603	1,137	1,139	1,899	1,110	1,616	1,177	1,190	1,129	1,310	1,160	1,221	859	776	656	410
23. <i>Simla Hill States</i> ..	3	1	37	2	126	4	69	3	62	2	23	3	14	1	5	1
24. <i>Bilaspur State</i> ..	..	..	11	..	95	..	15	..	20	..	..	..	..	..	..	..
25. Kangra ..	1	..	44	1	123	2	48	2	48	2	30	2	31	2	11	3
26. <i>Mandi State</i> ..	..	..	44	2	120	..	47	2	48	2	8	..	4	..	3	..
27. <i>Suket State</i> ..	..	..	6	..	11	..	17	1	13	..	9	1	..	..	2	..
28. <i>Chamba State</i> ..	..	..	31	..	87	..	43	5	42	3	17	2	16	1	10	2
SUB-HIMALAYAN ..	10	8	113	16	371	22	173	17	155	16	115	13	90	9	49	6
29. Ambala ..	27	21	178	41	400	46	242	38	218	36	205	31	123	17	101	11
30. <i>Kalsia State</i> ..	2	..	11	..	74	..	57	..	45	..	36	..	26	1	5	..
31. Hoshiarpur ..	..	..	127	1	446	2	85	2	110	2	54	2	41	1	0	..
32. Gurdaspur ..	7	4	82	14	305	27	118	10	112	11	63	7	40	4	14	2
33. Sialkot ..	7	3	97	9	348	17	157	14	138	12	104	4	72	6	35	5
34. Gujrat ..	4	1	82	3	248	7	92	4	89	4	59	3	49	2	11	1
35. Jhelum ..	2	1	117	..	359	12	136	6	122	5	76	6	72	3	13	2
36. Rawalpindi ..	46	33	203	83	731	80	512	78	420	73	367	59	227	27	161	20
37. Attock ..	2	1	55	3	152	5	104	5	81	4	57	4	..	..	..	..
NORTH-WEST DRY AREA ..	2	1	45	4	144	7	86	5	70	4	54	4	46	3	18	3
38. Montgomery ..	1	1	33	5	88	6	92	4	66	4	45	3	37	1	8	1
39. Shahpur ..	1	1	59	1	179	7	85	4	76	3	69	4	73	2	14	1
40. Mianwali ..	2	2	33	2	155	10	126	6	92	5	49	2	26	1	..	..
41. Lyallpur ..	1	..	79	3	228	9	122	5	104	4	55	4	35	3	..	..
42. Jhang ..	2	..	67	2	191	2	72	2	69	1	26	1	49	1	6	..
43. Multan ..	10	6	42	11	138	17	109	14	85	12	120	15	112	12	65	11
44. <i>Bahawalpur State</i> ..	4	1	11	3	62	3	45	4	34	3	29	3	10	1	3	..
45. Muzaffargarh ..	..	..	20	1	79	2	62	1	46	1	34	..	20	1	8	1
46. Dera Ghazi Khan ..	..	..	41	..	138	1	51	1	47	1	25	2	39	2	10	2
DELHI ..	68	62	275	62	678	99	693	121	560	102	..	..	..	..	..	..
INDO-GANGETIC PLAIN WEST ..	68	62	275	62	678	99	693	121	566	102	..	..	..	..	..	..
1 Delhi ..	68	62	275	62	678	99	693	121	566	102	..	..	..	..	..	..

SUBSIDIARY TABLE V.

Progress of education since 1881.

DISTRICT OR STATE AND NATURAL DIVISION.		NUMBER OF LITERATE <i>per mille.</i>																							
		<i>All ages.</i>										10—14 (<i>inclusive.</i>)				15—19 (<i>inclusive.</i>)				20 and over.					
		Males.					Females.					Males.		Females.		Males.		Females.		Males.		Females.			
		1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1921	1911	1921	1911	1921	1911	1921	1911	1921	1911	1921	1911
1 PUNJAB AND DELHI ..		66	63	65	61	47	8	6	3	2	1	54	42	12	9	98	78	17	12	97	95	10	7		
PUNJAB ..		64	..	..	..	..	8	..	..	..	..	53	..	12	..	96	..	17	..	94	..	9	..
INDO-GANGETIC PLAIN WEST (TOTAL) ..		68	63	61	59	47	9	7	3	2	1	54	41	13	10	97	76	19	14	100	94	11	7		
INDO-GANGETIC PLAIN WEST ..		64	..	..	..	..	8	..	..	..	..	51	..	12	..	92	..	17	..	94	..	9	..
1. Hissar ..		49	46	50	44	41	3	2	1	1	..	33	28	3	2	76	52	6	3	77	70	3	2		
2. Loharu State ..		12	26	38	21	30	2	1	2	1	1	14	6	6	2	18	31	4	1	16	41	2	1		
3. Rohtak ..		53	49	50	51	47	3	2	1	1	..	48	35	3	3	78	63	5	3	79	72	4	2		
4. Dujana State ..		32	41	45	35	47	1	1	1	1	..	13	30	..	1	51	73	2	1	53	59	1	2		
5. Gurgaon ..		54	42	49	48	42	3	2	1	1	..	45	29	4	3	60	53	7	4	80	63	4	2		
6. Pataudi State ..		60	53	64	68	57	3	2	1	1	..	45	29	2	1	55	44	9	3	94	86	3	3		
7. Karnal ..		42	41	43	48	39	3	2	1	1	..	25	20	4	2	55	13	6	2	65	63	4	2		
8. Jullundur ..		76	63	64	63	51	11	6	3	2	1	87	46	20	8	137	88	28	13	101	92	12	6		
9. Kapurthala State ..		59	66	55	54	39	6	5	3	2	1	56	46	9	6	87	83	12	10	83	98	8	7		
10. Ludhiana ..		99	85	83	67	48	16	9	4	2	1	116	65	34	13	160	108	38	18	134	122	17	11		
11. Malerkotla State ..		67	79	69	52	36	4	6	2	1	..	53	37	7	6	77	92	6	12	95	113	6	8		
12. Ferozepore ..		61	60	67	63	42	7	5	3	2	1	48	37	13	9	92	65	19	10	93	94	9	6		
13. Faridkot State ..		60	67	58	51	34	4	1	2	1	1	25	28	3	1	77	70	10	2	99	110	6	1		
14. Patiala State ..		61	62	42	56	52	5	4	1	1	..	35	27	5	3	71	62	10	6	94	97	6	5		
15. Jind State ..		46	44	50	46	39	4	2	2	1	..	27	18	4	2	65	44	8	5	72	69	5	3		
16. Nabha State ..		58	49	74	68	54	4	3	1	1	..	31	20	4	2	64	49	8	4	88	77	5	4		
17. Lahore ..		100	95	74	69	54	23	25	7	5	2	81	69	36	50	148	127	49	72	139	135	27	23		
18. Amritsar ..		69	72	74	64	51	8	8	5	3	1	50	50	15	12	93	94	17	15	105	107	10	10		
19. Gujranwala ..		62	52	62	59	51	12	5	4	1	1	62	44	19	9	98	79	27	13	82	76	13	6		
20. Sheikhupura ..		46	..	..	..	..	1	..	..	..	..	30	..	6	..	62	..	12	..	72	..	5	..
HIMALAYAN ..		74	61	67	63	48	7	5	4	3	1	56	36	11	6	92	62	12	8	104	88	8	5		
21. Nahan State ..		49	47	61	63	40	4	4	3	2	1	24	21	6	4	44	33	8	6	72	71	1	5		
22. Simla ..		211	236	222	191	166	156	131	85	18	31	244	272	244	177	255	245	242	215	227	262	162	123		
23. Simla Hill States ..		56	48	41	47	38	3	3	3	3	2	30	23	3	2	63	5	5	4	80	70	4	3		
24. Bilaspur State ..		62	32	21	46	14	3	1	..	..	..	31	19	3	1	68	34	4	1	89	5	3	1
25. Kangra ..		85	74	84	70	55	6	3	3	1	1	73	44	10	4	117	78	11	7	120	110	6	4		
26. Mandi State ..		76	32	47	62	34	3	2	1	1	..	51	12	6	2	80	30	4	2	117	60	4	2		
27. Suket State ..		48	43	40	24	48	3	1	..	1	2	27	13	4	1	42	38	8	2	69	63	3	1		
28. Chamba State ..		41	34	38	43	30	3	1	2	1	1	25	11	3	1	39	27	3	3	59	52	3	2		
SUB-HIMALAYAN ..		73	65	68	60	43	9	7	4	2	1	70	48	14	10	117	87	20	13	103	97	11	8		
29. Ambala ..		85	81	75	65	46	14	7	4	2	1	71	39	20	7	114	82	27	10	117	118	16	9		
30. Kalsia State ..		58	50	68	62	41	4	3	3	1	..	38	22	4	2	74	41	6	4	81	78	6	5		
31. Hoshiarpur ..		82	69	73	65	52	7	5	2	1	..	95	55	12	7	144	95	17	10	108	97	8	6		
32. Gurdaspur ..		58	50	51	47	39	8	4	2	1	1	64	42	14	6	98	63	20	8	81	74	9	5		
33. Sialkot ..		55	53	52	52	37	8	5	3	2	1	54	39	13	10	99	75	19	11	76	82	8	5		
34. Gujrat ..		60	54	61	48	32	7	4	3	2	..	59	49	10	7	96	85	15	9	85	79	8	5		
35. Jhelum ..		85	79	82	59	40	8	6	4	2	1	86	57	14	11	153	116	23	14	122	115	9	7		
36. Rawalpindi ..		120	101	92	81	55	19	20	9	4	2	92	76	28	32	176	137	35	35	169	144	23	23		
37. Attock ..		57	54	..	..	..	6	5	..	..	..	46	39	8	9	81	77	12	11	89	86	7	6
NORTH-WEST DRY AREA ..		53	60	69	69	54	6	4	3	1	1	41	28	9	6	85	82	13	8	81	95	7	5		
38. Montgomery ..		51	57	69	62	49	6	5	4	1	..	33	36	8	8	70	65	15	10	82	94	7	5		
39. Shahpur ..		58	66	72	66	48	10	8	7	2	1	51	48	17	14	91	92	23	20	85	100	12	10		
40. Mianwali ..		52	60	67	..	..	2	2	3	..	..	35	42	2	5	73	107	5	5	83	95	2	3
41. Lyallpur ..		52	52	46	..	..	6	4	1	..	..	49	35	9	5	96	66	12	8	76	94	7	5
42. Jhang ..		73	71	97	77	67	8	4	5	2	1	63	38	12	5	113	97	19	10	114	114	9	6		
43. Multan ..		63	86	101	84	70	7	5	4	2	1	45	50	10	6	95	113	15	9	95	137	8	6		
44. Bahawalpur State ..		27	37	51	57	40	2	2	..	1	..	17	20	2	2	40	42	3	3	42	57	2	2		
45. Muzaffargarh ..		52	67	65	68	57	4	2	2	1	1	36	43	5	3	83	97	8	6	78	105	4	2		
46. Dera Ghazi Khan ..		57	48	67	70	46	4	1	2	1	..	41	32	10	3	98	76	10	3	85	75	4	1		
DELHI ..		161	..	..	..	..	34	..	..	..	..	122	..	41	..	190	..	55	..	217	..	42	..
INDO-GANGETIC PLAIN WEST ..		161	..	..	..	..	34	..	..	..	..	122	..	41	..	190	..	55	..	217	..	42	..
1. Delhi ..		161	..	..	..	..	34	..	..	..	..	122	..	41	..	190	..	55	..	217	..	42	..

NOTE.—Figures of Sheikhupura for 1881, 1891, 1901 and 1911, of Attock for 1881, 1891 and 1901 and of Mianwali and Lyallpur for 1881 and 1891 are not available.

SUBSIDIARY TABLE VI.

Literacy by Caste.—Punjab.

CASTE.			NUMBER PER 1,000 WHO ARE LITERATE.						NUMBER PER 10,000 LITERATE IN ENGLISH.					
			1921.			1911.			1921.			1911.		
			Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
1			2	3	4	5	6	7	8	9	10	11	12	13
1. Aggarwal .. ..	..	..	209	371	16	212	381	13	144	258	7	117	209	9
2. Ahir .. ..	..	..	12	21	1	8	14	..	14	25	1	6	10	..
3. Arain .. ..	..	..	17	28	3	11	19	1	29	52	1	15	27	1
4. Arora .. ..	..	..	172	291	29	210	367	28	142	255	10	123	225	3
5. Awan .. ..	..	..	20	36	1	13	25	1	23	43	..	10	18	..
6. Barwala .. ..	..	..	11	20	1	7	12	1	7	12	..	1	2	..
7. Bawaria .. ..	..	..	2	3	..	4	6	..	1	1	..	1	1	..
8. Bharai .. ..	..	..	6	10	..	4	7	..	4	7	..	1	1	..
9. Biloch .. ..	..	..	9	16	1	8	13	1	6	12	..	5	9	..
10. Brahman .. ..	..	..	122	208	17	113	195	12	174	312	7	114	198	10
11. Chamar .. ..	..	..	5	9	..	4	7	..	1	2	..	..	1	..
12. Chhimba .. ..	..	..	33	57	4	28	48	3	19	34	..	8	14	..
13. Churah .. ..	..	..	2	4	..	1	2	..	2	4	..	1	1	..
14. Dagi and Koli .. ..	..	..	5	9	..	3	5	..	3	5	..	1	2	..
15. Dhanak .. ..	..	..	2	3	..	..	1	..	..	..	..	..	..	..
16. Dhobi .. ..	..	..	11	19	2	9	17	1	6	10	..	4	7	..
17. Dogar .. ..	..	..	6	11	1	5	9	..	6	11	1	3	5	..
18. Dumna .. ..	..	..	5	9	..	2	3	..	1	2	..	1	1	..
19. Faqir .. ..	..	..	21	37	2	36	60	2	6	11	1	6	10	..
20. Ghirath .. ..	..	..	16	30	..	11	21	..	5	9	..	6	12	..
21. Gujjar .. ..	..	..	11	19	1	7	12	..	10	17	..	4	7	..
22. Harni .. ..	..	..	3	6	..	3	5	..	..	..	..	..	..	..
23. Jat .. ..	..	..	19	31	3	17	28	2	20	34	1	10	20	..
24. Jhiwar .. ..	..	..	12	21	2	11	19	1	12	22	..	6	12	..
25. Jogi (Rawal) .. ..	..	..	43	77	6	24	46	1	32	62	..	13	27	..
26. Julaha .. ..	..	..	11	20	1	8	14	..	6	10	..	4	7	..
27. Kamboh .. ..	..	..	15	26	2	16	27	2	15	27	1	12	21	2
28. Kanet .. ..	..	..	19	36	1	17	32	1	13	24	..	5	10	..
29. Kashmiri .. ..	..	..	39	64	11	34	57	7	92	167	7	77	141	3
30. Khatri .. ..	..	..	231	373	60	250	405	60	559	976	37	446	801	10
31. Khoja .. ..	..	..	57	103	10	58	107	3	62	118	5	47	86	3
32. Khokhar .. ..	..	..	28	16	6	16	28	1	46	82	3	22	40	..
33. Kumhar .. ..	..	..	5	9	1	4	7	..	4	7	..	2	5	..
34. Labana .. ..	..	..	30	52	6	23	41	1	15	29	..	6	11	..
35. Lohar .. ..	..	..	17	29	2	14	25	1	20	36	1	9	17	..
36. Machhi .. ..	..	..	4	7	1	3	5	..	3	5	..	2	3	..
37. Mahtam .. ..	..	..	4	7	..	9	17	..	1	1	..	1	2	..
38. Mali .. ..	..	..	6	11	..	5	9	1	6	12	..	7	12	..
39. Maliar .. ..	..	..	6	11	1	5	9	..	3	6	..	2	3	..
40. Mallah .. ..	..	..	5	8	..	3	6	..	4	6	..	2	3	..
41. Meo .. ..	..	..	6	12	..	5	10	..	2	4	..	2	4	..
42. Mirasi .. ..	..	..	16	28	1	11	20	..	9	17	1	3	6	..
43. Mochi .. ..	..	..	6	9	1	4	7	..	2	4	..	2	3	..
44. Moghal .. ..	..	..	53	88	13	49	82	8	104	189	9	88	160	2
45. Mussalli .. ..	..	..	1	2	..	1	1	..	1	1	..	..	..	..
46. Nai .. ..	..	..	16	27	2	13	23	1	13	24	1	6	12	..
47. Pakhiwara .. ..	..	..	17	31	1	3	4	1	..	..	..	..	..	..
48. Pathan .. ..	..	..	57	94	13	53	86	8	119	212	7	89	154	3
49. Qassab .. ..	..	..	11	20	2	7	14	1	11	21	..	4	8	..
50. Quroshi .. ..	..	..	92	153	22	77	136	10	150	273	11	98	183	2
51. Rajput .. ..	..	..	33	57	5	26	45	3	46	80	5	29	52	1
52. Saini .. ..	..	..	35	61	4	26	45	2	45	82	1	19	34	..
53. Sansi .. ..	..	..	32	50	8	2	4	..	118	178	35	1	2	..
54. Sayad .. ..	..	..	97	161	23	83	145	12	164	297	4	118	219	3
55. Sheikh .. ..	..	..	87	130	25	74	124	13	222	385	12	152	272	4
56. Sunar .. ..	..	..	82	140	15	80	141	7	38	68	2	2	41	..
57. Tarkhan .. ..	..	..	23	38	6	23	39	3	17	30	1	13	23	..
58. Teli .. ..	..	..	7	13	1	6	10	1	6	9	..	4	7	..

SUBSIDIARY TABLE VI.

Literacy by Caste.—Delhi.

No.	CASTE.	NUMBER PER 1,000.						NUMBER PER 10,000 LITERATE IN ENGLISH.		
		Literate.			Illiterate.			Total.	Males.	Females.
		Total.	Males.	Females.	Total.	Males.	Females.			
1		2	3	4	5	6	7	8	9	10
1. Aggarwal		343	541	74	657	459	926	599	1,009	41
2. Ahir		25	41	3	975	959	997	39	66	2
3. Arain		37	66	2	963	939	998	64	115	..
4. Brahman		235	319	63	765	651	937	658	1,073	31
5. Chamar		1	7	..	996	995	1,000	1	2	1
6. Chuhra		5	8	..	995	992	1,000	3	5	..
7. Dagi and Koli		15	21	1	987	979	999	10	16	..
8. Dhanak		3	4	..	997	996	1,000	..	..	..
9. Dhobi		5	8	1	995	992	999	3	5	..
10. Faqir		9	18	..	991	989	1,000	1	7	..
11. Gujjar		12	23	..	987	977	1,000	11	25	..
12. Jat		35	50	1	965	941	999	62	111	1
13. Jhiwar		27	41	2	973	959	998	15	24	..
14. Julaha		7	12	..	993	988	1,000	7	6	..
15. Khatri		331	599	98	619	419	992	1,689	2,813	149
16. Kunihar		7	12	1	993	988	999	1	2	..
17. Lohar		33	56	3	965	941	997	43	73	..
18. Machhi		16	13	12	984	982	988	19	11	23
19. Mali		27	46	2	973	954	998	19	33	..
20. Meo		25	43	1	975	957	999	34	53	6
21. Moghal		203	295	87	797	705	913	579	1,010	40
22. Nai		30	51	6	970	949	993	32	59	..
23. Pathan		118	182	19	882	815	981	256	422	1
24. Qureshi		111	185	25	889	815	975	306	494	83
25. Rajput		107	152	30	893	848	970	213	365	35
26. Saini		11	25	1	986	975	999	18	34	..
27. Sapsi	1,000	1,000	1,000	..	..	..
28. Sayad		261	379	91	739	621	906	701	1,191	4
29. Sheikh		99	158	21	901	842	979	115	218	8
30. Sunar		139	230	25	861	770	975	39	69	..
31. Tarkhan		69	107	5	931	893	955	65	103	..
32. Teli		12	22	..	988	978	1,000	13	23	..

SUBSIDIARY TABLE VII.

Showing the growth in the number of educational institutions, scholars and expenditure from 1889-90 to 1920-21 from the returns of the Education Department, Punjab.

Class of Institution.		1889—1890.				1890—1891.				1891—1892.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
<i>Collegiate Education.</i>	Arts Colleges ..	7	..	439	..	7	..	468	..	7	..	534	..
	Professional Colleges ..	1	..	102	4	1	..	124	..	1	..	144	..
<i>School Education, General.</i>	Secondary Schools ..	250	24	44,512	1,437	257	26	44,778	1,040	250	28	48,709	1,878
	Primary Schools ..	1,677	299	84,738	8,555	1,720	299	83,249	9,012	1,733	313	88,972	10,100
<i>School Education, Special.</i>	Training Schools ..	5	..	316	..	5	..	342	..	6	..	357	..
	All Others ..	8	..	783	15	7	..	782	..	7	..	937	..
<i>Private Institutions.</i>	Advanced ..	944	..	12,595	..	794	..	9,408	..	688	..	9,320	..
	Elementary ..	6,453	806	93,986	9,693	5,520	998	83,905	11,999	5,755	611	91,092	8,178
	Total ..	9,345	1,128	237,471	19,704	8,317	1,323	223,056	22,657	8,456	952	240,065	20,162
Expenditure on education ..		Rs. 24,32,855				Rs. 25,33,609				Rs. 26,70,499			
		1892—1893.				1893—1894.				1894—1895.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
<i>Collegiate Education.</i>	Arts Colleges ..	8	..	661	..	9	..	870	..	9	..	1,003	..
	Professional Colleges ..	1	..	158	..	1	..	189	..	1	..	211	..
<i>School Education, General.</i>	Secondary Schools ..	271	27	48,812	1,898	283	28	51,328	2,048	290	29	52,632	2,161
	Primary Schools ..	1,762	325	83,381	10,414	1,787	322	85,611	10,774	2,446	333	108,426	10,080
<i>School Education, Special.</i>	Training Schools ..	6	..	321	..	6	..	278	..	6	..	342	..
	All Others ..	8	..	1,050	..	7	..	1,100	..	8	..	1,366	..
<i>Private Institutions.</i>	Advanced ..	660	..	7,677	..	585	..	7,957	..	493	..	6,745	..
	Elementary ..	5,151	1,025	84,210	12,517	5,276	1,023	87,188	14,082	4,109	918	62,660	12,235
	Total ..	7,867	1,377	226,270	24,829	7,953	1,373	234,521	26,904	7,362	1,280	233,385	25,376
Expenditure on education ..		Rs. 28,07,953				Rs. 28,81,125				Rs. 27,70,430			
		1895—1896.				1896—1897.				1897—1898.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
<i>Collegiate Education.</i>	Arts Colleges ..	9	..	1,070	..	9	..	1,171	..	10	..	1,157	..
	Professional Colleges ..	1	..	220	8	1	..	231	7	1	..	200	7
<i>School Education, General.</i>	Secondary Schools ..	296	31	55,976	2,422	315	31	58,600	2,528	339	32	60,764	2,632
	Primary Schools ..	2,468	328	100,862	11,055	2,453	317	108,333	10,713	2,423	319	106,793	11,205
<i>School Education, Special.</i>	Training Schools ..	6	..	344	..	6	..	352	..	6	..	326	..
	All Others ..	9	1	1,358	42	10	2	1,562	241	10	3	1,654	252
<i>Private Institutions.</i>	Advanced ..	488	..	7,125	..	504	..	7,264	..	445	..	6,612	..
	Elementary ..	4,381	645	66,771	9,304	4,340	519	67,167	7,753	4,100	506	63,016	7,933
	Total ..	7,658	1,006	242,724	22,891	7,638	869	244,680	21,242	7,334	860	240,522	22,039
Expenditure on education ..		Rs. 30,27,966				Rs. 30,72,714				Rs. 31,56,514			
		1898—1899.				1899—1900.				1900—1901.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
<i>Collegiate Education.</i>	Arts Colleges ..	10	..	1,250	..	11	..	1,272	..	13	..	1,251	..
	Professional Colleges ..	1	..	200	8	1	..	176	13	1	..	167	11
<i>School Education, General.</i>	Secondary Schools ..	339	33	61,697	2,550	348	35	64,541	2,605	372	34	65,392	2,675
	Primary Schools ..	2,360	321	102,458	11,070	2,339	308	104,349	11,271	2,367	315	105,352	12,068
<i>School Education, Special.</i>	Training Schools ..	6	..	322	..	6	..	344	..	6	..	322	..
	All Others ..	10	3	1,718	173	13	3	1,940	189	13	2	2,013	154
<i>Private Institutions.</i>	Advanced ..	449	..	6,687	..	418	..	6,192	6	378	..	6,541	..
	Elementary ..	4,111	515	64,335	8,629	3,905	480	60,811	8,551	3,505	473	54,456	8,762
	Total ..	7,276	872	238,667	22,430	7,041	826	239,624	22,695	6,655	824	235,404	23,670
Expenditure on education ..		Rs. 32,20,666				Rs. 33,23,282				Rs. 33,02,046			

SUBSIDIARY TABLE VII.

Showing the growth in the number of educational institutions, scholars and expenditure from 1889-90 to 1920-21 from the returns of the Education Department, Punjab—continued.

Class of Institution.		1901—1902.				1902—1903.				1903—1904.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
<i>Collegiate Education.</i>	Arts Colleges ..	13	..	1,331	..	15	..	1,312	..	15	..	1,360	..
	Professional Colleges ..	3	..	404	12	3	..	455	..	3	..	480	..
<i>School Education, General.</i>	Secondary Schools	351	34	62,679	2,795	351	32	64,887	2,678	311	35	61,698	2,811
<i>School Education, Special.</i>	Primary Schools	2,257	326	100,663	12,334	2,152	353	108,177	13,651	2,462	360	109,343	13,705
<i>Private Institutions.</i>	Training Schools	5	..	261	..	5	..	255	..	5	..	248	..
	All Others ..	11	3	1,692	132	15	4	1,841	269	16	6	2,012	244
	Advanced ..	251	..	4,645	39	312	..	5,305	..	351	..	5,351	43
	Elementary ..	3,050	549	40,917	11,219	3,809	671	60,237	10,468	3,631	716	58,356	12,565
	Total ..	5,941	912	221,592	26,531	6,992	1,063	242,470	27,069	3,631	1,117	241,854	29,376
Expenditure on education ..		Rs. 32,53,827				Rs. 37,63,988				Rs. 41,16,698			
		1904—1905.				1905—1906.				1906—1907.			
<i>Collegiate Education.</i>	Arts Colleges ..	15	..	1,378	..	10	..	1,396	..	10	..	1,598	..
	Professional Colleges ..	3	1	605	24	3	1	524	34	3	2	629	39
<i>School Education, General.</i>	Secondary Schools	338	36	64,785	3,003	288	36	59,506	2,956	290	39	64,359	3,066
<i>School Education, Special.</i>	Primary Schools	2,514	364	112,410	13,814	2,930	459	127,067	16,770	3,151	542	141,345	20,201
<i>Private Institutions.</i>	Training Schools	5	1	363	40	5	1	422	53	5	1	401	2,521
	All Others ..	17	8	2,179	438	17	12	2,179	567	18	13	72	674
	Advanced ..	306	1	4,950	124	226	..	3,907	36	248	3	4,006	168
	Elementary ..	3,682	635	59,086	11,764	2,815	565	47,633	11,707	2,772	688	48,095	13,073
	Total ..	6,880	1,046	245,756	29,207	6,324	1,074	242,624	32,123	6,497	1,288	262,954	37,283
Expenditure on education ..		Rs. 43,37,615				Rs. 49,05,576				Rs. 51,96,890			
		1907—1908.				1908—1909.				1909—1910.			
<i>Collegiate Education.</i>	Arts Colleges ..	10	..	1,725	..	10	..	1,860	..	10	..	2,022	..
	Professional Colleges ..	3	2	572	34	4	2	578	53	5	2	590	44
<i>School Education, General.</i>	Secondary Schools	291	40	67,220	3,333	296	44	71,683	3,806	304	42	81,926	4,006
<i>School Education, Special.</i>	Primary Schools	3,343	586	146,209	21,615	3,108	600	149,542	22,672	3,345	602	157,946	26,309
<i>Private Institutions.</i>	Training Schools	5	1	365	37	5	1	371	25	5	1	390	16
	All Others ..	21	11	2,120	660	23	11	2,468	726	25	10	2,848	620
	Advanced ..	208	..	4,215	..	168	1	3,710	85	183	2	3,269	127
	Elementary ..	2,510	595	43,958	10,419	2,022	508	35,413	9,584	2,051	643	36,499	12,864
	Total ..	6,391	1,235	266,765	36,098	5,936	1,167	265,625	36,951	5,931	1,302	285,480	43,986
Expenditure on education ..		Rs. 56,36,126				Rs. 55,59,278				Rs. 58,43,382.			
		1910—1911.				1911—1912.				1912—1913.			
<i>Collegiate Education.</i>	Arts Colleges ..	11	..	2,270	..	11	..	2,659	..	9	..	2,770	3
	Professional Colleges ..	5	2	667	42	6	2	860	30	6	1	840	35
<i>School Education, General.</i>	Secondary Schools	307	50	87,277	5,168	312	52	93,326	6,092	317	56	93,885	7,190
<i>School Education, Special.</i>	Primary Schools	3,321	599	164,081	26,174	3,417	637	179,410	23,269	3,689	709	197,230	32,118
<i>Private Institutions.</i>	Training Schools	6	6	382	55	7	6	452	48	20	8	672	84
	All Others ..	24	12	2,755	747	24	19	2,785	1,236	25	5	2,617	408
	Advanced ..	166	..	3,817	97	176	..	4,486	59	186	1	3,877	90
	Elementary ..	2,053	716	38,386	15,022	1,867	875	43,226	53,909	2,384	908	50,498	18,174
	Total ..	5,893	1,385	299,635	47,305	5,820	1,591	327,204	53,909	6,636	1,688	352,389	58,102
Expenditure on education ..		Rs. 60,57,050				Rs. 68,64,909				Rs. 84,20,780.			

SUBSIDIARY TABLE VII.

Showing the growth in the number of educational institutions, scholars and expenditure from 1889-90 to 1920-21 from the returns of the Education Department, Punjab—concluded.

Class of Institution.		1913—1914.				1914—1915.				1915—1916.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Collegiate Education.	Arts Colleges ..	9	1	3,163	13	9	1	3,496	18	9	1	3,873	20
	Professional Colleges ..	6	1	792	37	6	1	833	36	6	1	921	39
School Education, General.	Secondary Schools	352	59	98,680	7,744	387	63	102,713	8,338	413	71	107,390	10,272
	Primary Schools	4,158	793	219,796	37,199	4,552	878	227,890	38,757	4,757	922	234,192	41,161
School Education, Special.	Training Schools	23	7	795	111	24	9	861	176	24	10	960	229
	Primary Schools	31	5	2,956	527	36	5	3,124	507	37	5	3,339	557
Private Institutions.	Advanced ..	226	..	3,961	38	182	..	3,104	..	192	1	3,228	28
	Primary ..	2,263	1,003	45,626	18,518	1,992	969	39,073	16,983	2,067	862	40,402	15,546
Total ..		7,068	1,869	375,769	65,187	7,188	1,926	381,094	64,815	7,505	1,873	394,305	68,852
Expenditure on education ..		Rs. 93,21,575				Rs. 1,07,18,807				Rs. 1,12,16,765			

		1916—1917.				1917—1918.				1918—1919.			
		Institutions.		Scholars.		Institutions.		Scholars.		Institutions.		Scholars.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Collegiate Education.	Arts Colleges ..	10	1	4,214	22	11	1	4,593	28	12	1	4,540	30
	Professional Colleges ..	6	1	1,115	39	6	1	1,332	38	6	1	1,461	29
School Education, General.	Secondary Schools	422	75	111,541	10,970	431	80	112,050	11,286	462	89	116,460	13,745
	Primary Schools	4,918	935	244,796	43,055	5,081	954	242,335	43,254	5,172	951	246,771	42,919
School Education, Special.	Training Schools	16	13	912	224	13	14	804	290	18	11	911	296
	All Others ..	40	5	3,564	591	38	6	3,402	632	39	5	3,854	613
Private Institutions.	Advanced ..	175	..	3,313	67	167	1	2,740	65	140	2	2,444	23
	Elementary ..	1,868	872	37,581	14,734	1,671	760	33,743	12,247	1,380	667	31,502	11,003
Total ..		7,455	1,902	407,036	69,702	7,424	1,817	400,999	67,840	7,238	1,727	407,943	69,257
Expenditure on education ..		Rs. 1,08,63,320				Rs. 1,14,72,852				Rs. 1,24,02,186			

		1919—1920.				1920—1921.							
		Institutions.		Scholars.		Institutions.		Scholars.					
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
Collegiate Education.	Arts Colleges ..	12	1	4,566	38	16	1	4,266	33				
	Professional Colleges ..	8	1	1,501	27	9	1	1,676	36				
School Education, General.	Secondary Schools	835	93	161,870	13,761	976	99	189,655	13,936				
	Primary Schools	5,162	1,001	228,404	45,855	5,369	1,017	238,674	47,212				
School Education, Special.	Training Schools	15	12	1,062	300	18	12	1,305	359				
	All Others ..	36	6	3,197	691	35	6	3,017	669				
Private Institutions.	Advanced ..	140	8	2,596	185	147	2	2,901	188				
	Elementary ..	1,615	716	39,221	11,715	1,551	680	40,363	12,700				
Total ..		7,823	1,838	445,417	72,572	8,121	1,818	481,857	75,132				
Expenditure on education ..		Rs. 1,41,93,952				Rs. 1,84,06,424							

CHAPTER IX.

Language.

153. Reference to Statistics. 153. Accuracy of the returns. 161. General Distribution of languages. 161. Assam-Burmese group. 162. Tibeto-Himalayan Branch (Tibetan group). 163. Pronominalised Himalayan group (Western sub-group). 164. The Dravidian family. 165. Eranian branch. 166. Non-Sanskritic sub-branch. (Kishmiri). 167. Lahnda. 168. Sindhi. 169. Marathi. 170. Eastern group. 171. Western Hindi. 172. Hindostani. 173. Urdu. 174. Other Hindi. 175. Rajasthani. 176. Gujarati. 177. Punjabi. 178. Standard Punjabi. 179. Dogri. 180. Western Pahari. 181. Simla group. 182. Kulu group. 183. Munda group. 184. Chamba group. 185. Central Pahari (Garhwali). 186. Eastern Pahari (Naijadi). 187. Gypsy Dialects. 188. Asiatic Languages. 189. Non-Asiatic Languages. 190. Remarks about Linguistic boundaries. 191. The influence of Education on local dialects. 192. Literary activity in different languages.

158. The statistics of language are given in Imperial Table X, where they are grouped under three main headings, *viz.*, the Vernaculars of India, Vernaculars of other Asiatic Countries, and European Languages. In this chapter the figures will be discussed according to the scheme of classification drawn up by Sir G. A. Grierson, and prescribed by the Census Commissioner. At the end of this chapter will be found the subsidiary tables showing—

Reference to Statistics.

- (I) the distribution of the total population by languages,
- (II) the distribution of important languages of the provinces by natural divisions, districts and States, and
- (III) the number of books published annually in each language.

159. The instructions issued at this census with respect to the entry of language, were the same as in 1911. The enumerators were required to enter the language ordinarily used by each person in his home. The rule was fully explained to the enumerators, with the result that registration of dialects in place of main languages was generally avoided. The few entries relating to dialects made in the enumeration books in spite of the precautions taken, were classified in the compilation office on the method detailed on the title page to Table X. The statistics must be taken as fairly accurate, as no vitiating tendency was noticed at the time of preliminary or final enumeration. Only in the case of aboriginal tribes, whose special languages were described by their caste names in 1911, the figures appear to be somewhat unreliable. 2,521 persons have recorded their language by caste names as against 12,136 in 1911. Table XIII (caste) shows that members of aboriginal tribes such as Bawaria, Sansi, Od, etc., are still found in large numbers in many districts of the Punjab, and there is no reason to believe that they have lost or abandoned their special languages. The only reason seems to be that the enumerators have not been able to discriminate between them and Punjabi (the difference in vocabulary being very slight).

Accuracy of the returns

160. Statistics of the distribution of the main language classified according to Sir G. A. Grierson's scheme are exhibited in Subsidiary Table I. The vernaculars of the provinces belong to one or other of the 2 linguistic families, *viz.*, the Tibeto-Chinese and the Indo-European with a sprinkling of unclassified languages. The languages of the Tibeto-Chinese family were returned by about 38,000 persons, or 2 *per mille* of the population in both the provinces. The languages of the Indo-European family are spoken throughout the provinces, nearly 25,514,000 persons (or 997 *per mille* in the Punjab and 990 in Delhi) having returned languages belonging to this head. The languages classed under the head "Indo-European family," belong chiefly to the Sanskritic sub-branch of the Indian branch of the Aryan sub-family, the number of the speakers of the Eastern group of the Eranian branch, Aryan sub-family, and of the non-Sanskritic language being 4 *per mille* and less than 1 *per mille* of the population, respectively. 2,521 persons in the Punjab speak unclassified languages of India, and Persian and English belonging to the Eranian and Teutonic groups of the Indo-European family, are spoken by 1,686 and 31,443 persons respectively in both the provinces. Persons speaking languages of the Dravidian family number 2,206 in the Punjab and 437 in Delhi while 6 persons were registered as speaking the Malaya language of the Malayo-polynesian family, in Rawalpindi (1), Patiala (2) and Delhi (3). A majority of the people speak languages of the Western group (Sanskritic sub-branch of Aryan sub-family) which is represented by Punjabi, Western Hindi, Rajasthani, and Western Pahari

General Distribution of languages.

The Punjabi is spoken by 60·6 per cent. of the population of the Punjab, and Western Pahari which belongs to the same sub-branch is the language of 4·4 per cent. of the population. Western Hindi, which comprises Urdu, Hindostani, and other Hindi dialects used in the Eastern districts of the Punjab and Delhi, is spoken by 14·2 and 94·1 per cent., and Rajasthani by 2·8 and 2·3 per cent. of the population in the Punjab and Delhi provinces respectively.

Tibeto-Chinese Family.

The Tibeto-Chinese family comprises the Tibeto-Burman languages, which are further divided into Tibeto-Himalayan languages (*e. g.*, Tibetan, Bhotia, Balti, Ladakhi belonging to the Tibetan group and Kanauri, Lahuli, Malani falling under the Western sub-group of the Pronominalised Himalayan group) and Assami-Burmese languages, such as Assamese and Burmese. The speakers of the languages of this family now aggregate 38,378 as against 41,615 in 1911. The figures of the Tibetan group and Pronominalised Himalayan group are noted in the margin. The figures against Bhotia (others) include 2,888 persons, who returned their language as Bhotani. All these persons were enumerated in the Kangra district, where the Bhotia spoken, closely resembles the Tibetan language: so these figures have been shown under the Tibetan group.

Language	Punjab.	Delhi.
TIBETAN GROUP.		
Tibetan	5,674	6
Bhotia (others)	3,994	..
Balti	10	..
Ladakhi	128	..
Total	9,206	6
PRONOMINALISED HIMALAYAN GROUP.		
Kanauri	22,098	..
Lahuli	6,578	..
Malani	396	..
Total	29,072	..

Assam-Burmese group.

161. The languages belonging to the Tibeto-Chinese family which can be classed under the Tibeto-Burman sub-family are spoken by 203 immigrants enumerated in the places named in the margin.

Tibeto-Himalayan branch (Tibetan group).

Name of District or State.	Burmese	Assamese.
Attock .. ..	..	1
Rohtak	1	..
Simla	1	..
Jullundur	2	..
Ferozepore	4	..
Lahore	183	..
Rawalpindi	3	..
Kalsi	2	..
Simla Hill States	1	..
Delhi	3	2

162. This branch is divided into two groups of which the first is the Tibetan group, which includes the Tibetan and Bhotia. The pure Tibetan was returned chiefly from Simla, Kangra, Gurdaspur, Keonthal, Mandi, Patiala, and Bashahr.

The Bhotia was registered in Kangra. The figures of Bhotia also include Balti, Bhotani, and those entries of Bhotia in which there was no specification of the country, and in which caste or tribe of the speakers did not admit of any definite classification.

Pronominalised Himalayan group (Western sub-group).

163. All the languages of this group that appear in the returns belong to the Western group, *i. e.*, Kanauri, Lahuli, and Malani. Kanauri is the language of Kanets in the Bashahr State, while Lahuli and Malani is confined to Lahul, a tract of the Kangra district. Lahuli was classified at the last census under the Tibetan group as distinguished from Chamba Lahuli; but the characteristics of both the languages being the same, no attempt has been made at the recent census to separate them.

The Dravidian family.

164. The Dravidian languages include Kanarese, Tamil, Telugu, Mad-rasi, and Malayalam. Tamil is the language of 2,314 immigrants of whom 1,923 were enumerated in the Punjab and 391 in Delhi. In the former province the Lahore district alone contributes 1,310 immigrants speaking Tamil. Telugu was returned by 264 persons in the Punjab and 46 in Delhi; while Malayalam is represented by 27 persons found in Ambala and Patiala.

Indo-European Family, Aryan Sub-Family.

Eranian branch.

165. The only languages belonging to the Eranian branch (Eastern group) of the Aryan sub-family are Balochi and Pashto.

(a) *Balochi.*—Balochi or the language of the Baloch nation was returned by 56,013 persons in the Dera Ghazi Khan district and 920 in the Bahawalpur State out of 57,145 persons registered in the Punjab as speaking this language. The number of speakers is 13,530 less than in 1911, though the strength

of Balochs by caste has fallen only from 532,499 to 532,148 during the last ten years. This shows that Balochs are giving up their tribal language and prefer to speak the dialects prevalent in those parts of the Punjab where they reside. The decrease of 12,908 in Dera Ghazi Khen among the Balochi-speaking population seems to be due to the general causes discussed in Chapters I and IV, which have affected the population of that district.

(b) *Pashto*.—Pashto is the language of Afghanistan. In the Punjab it is spoken by Pathan settlers in the border districts of Attock and Mianwali. In Attock the Chhachi tract close to the border of Hazara and Mianwali, and the part of the district which lies west of the Indus is inhabited by these Pathans. The different entries found in the enumeration books and classified as Pashto are Pashto (59,494), Afghani (171), Chhachi (32), Kabli (1), and Pathani (5). The number returned in both the provinces under this head is 59,703 as against 67,174 in 1911. The increase in the Mianwali district from 15,191 to 19,290 speakers is more than counterbalanced by the decreases, occurring in the Attock district and districts of the Lahore Division.

166. The only language belonging to the non-sanskritic sub-branch of the Indian branch of the Aryan sub-family spoken in the provinces is Kashmiri. The number of persons speaking this language was 8,523 in 1901 and 7,190 in 1911; but has now fallen to 4,690, a fact which shows that Kashmiris who have settled in these provinces have adopted the Punjabi language of their neighbours. This is amply proved if we compare the strength of Kashmiris returned in the caste Table XIII with that shown by the language table. Kashmiri now appears in the return as the language of 4,690 persons though Kashmiris themselves have a strength of 169,761; in other words only about 3 out of every 100 Kashmiris

Non-Sans-
kritic sub-
branch
Kashmiri).

Simla	..	740
Kangra	..	451
Lahore	..	617
Amritsar	..	567
Gurdaspur	..	485
Rawalpindi	..	710
Gujranwala	..	263
Chamba	..	306

still retain their own language. The districts and States supplying the largest number of Kashmiris as speaking their own language are noted in the margin. The figures include immigrants who usually rush to the Punjab during the winter and earn their living generally by cutting wood.

North-Western Group.

167. Lahnda is the name given by Sir George A. Grierson to the language of the Western Punjab. It is difficult to draw any distinguishing line between Lahnda and Punjabi spoken in the Central and Eastern Punjab as it emerges into Lahnda very gradually. In the words of Sir George A. Grierson we may take a conventional line running north and south through the Eastern Central Punjab and call everything to the east of it Punjabi, and everything to the west of it Lahnda, but it must be understood that the change from one language to the other is so gradual that many typical Lahnda peculiarities will be found on the east of the line and many typical Punjabi peculiarities on the west. The conventional line adopted by Sir G. A. Grierson, is illustrated by the map on page 353 of the Punjab Census Report of 1911 and needs no further remarks. The various names under which Lahnda has been registered in different parts of the province are Lahnda (901,098), Dhanni (25), Dhanauchi (103), Jatki (631,914), Jhelumi (7), Kachhri (2), Multani (2,342,954), Peshawari (70), Pothowari (423,802), Thalochari (491), and Ubhechi (2). These names represent sub-dialects of Lahnda, which according to Sir G. A. Grierson, has 3 main dialects, viz., Southern or Standard, North-Eastern, and North-Western.

Lahnda.

The form of Lahnda which has been designed as the Standard is that spoken in the Doab of the district of Shahpur. It has three sub-dialects, the Standard proper, Multani, and Thali or Thalochari. The Standard proper is spoken in the Shahpur, Jhang, Lyallpur, Montgomery, Gujranwala and Gujrat districts, and the different names by which it goes are Jatki (in Jhang and Lyallpur), and Kachhri (in Kachhi or alluvial portion of the Jhang district). Multani is spoken in the districts of Multan, Muzaffargarh, Dera Ghazi Khan and in the Bahawalpur State. Multani differs from the Standard of the Shahpur Doab in pronunciation. Thal or Thalochari is found in the districts of Mianwali, Jhelum Shahpur, Jhang, and the north of Muzaffargarh.

Standard
Dialect.

North-
Eastern
Dialects.

The home of North-Eastern Dialect of Lahnda is the Pothowar plain in the Punjab, which consists of the eastern part of the district of Jhelum and the plains portion of the district of Rawalpindi. It is designated by several names based on the tribes using it. The form spoken in the Pothowar is known as Pothowari, and that used in Jhelum as Jhelumi. In the district of Attock it is called Awankari, and across the Indus as Peshawari or Hindko.

North-
Western
Dialect.

The North-Western Dialect beginning in the middle of the Salt Range extends in the Punjab northwards through Western Jhelum into the eastern part of the Attock district. In the Jhelum district it is known as Dhanni.

Lahnda is spoken now by altogether 4,303,479 persons, of whom 3,682,856 are residents of the Multan and Rawalpindi Divisions. In these divisions it is the language of nearly 50 per cent. of the population and the number of its speakers has fallen by 0.11 per cent. during the last ten years which is about 7 per cent. less than the rate of increase of the general population. The loss in percentage is due to the influx of large numbers of immigrants from the Central Punjab to the new colonies of Montgomery, Multan, Shahpur and Lyallpur.

Sindhi.

168. Sindhi as its name shows is the language of the province of Sindh but it extends beyond the borders of Sindh into the south-western corner of the Punjab. It is closely connected with Lahnda, and in the Southern Lahnda Dialect, Sindhi pronunciation is usually followed. The largest figures were returned from Bahawalpur (16,732) where Sindhi is indigenous, and Lahore (1,162) and Multan (350) which receive immigrants from Sindh on account of their being big trading centres.

Southern Group.

Marhati.

169. 1,511 persons were enumerated in both the provinces as speaking Marhati as against 815 in 1911. The majority of Marhati speakers was returned from Lahore division, which comprises important trading centres like that of Amritsar and Lahore. The different names employed to denote this language in the census returns were Dakhni and Konkani.

Eastern Group.

Oriya.

170. Oriya is returned for 3 persons in the Punjab who were found in the Ambala district, and for 1,177 persons in Delhi. The large number returned as speaking Oriya in the Delhi province is made up of immigrants from other provinces to Delhi on account of its now being a seat of the Government of India.

Bengali.

Bengali is spoken by 4,852 persons in the Punjab and Delhi provinces, a large increase over the figures of the previous census. The increase is contributed mainly by Delhi 2,037 persons and by Lahore 680 persons, and the reason lies in the increased facilities offered by these places to immigrants for employment as clerks.

Western Group.

Western
Hindi.

171. The languages grouped under this head are Western Hindi, Rajasthani, Gujrati, Punjabi, and Western Pahari. Western Hindi, which includes Hindostani, Urdu, and other Hindi dialects, are spoken by 4,020,473 persons of whom 3,560,863 were enumerated in the Punjab. In both the provinces it is the language of 157 *per mille* of the population and the number of its speakers has risen by 5.07 per cent. during the last ten years, which is nearly equal to the rate of increase of the general population of the provinces.

Hindostani

172. The three principal dialects of Western Hindi differ from one another very little in vocabulary and expression, and hence it is very difficult to define them properly. Hindostani literally means the language of Hindostan, but in the linguistic survey it is the name given to the dialect whose home is the Upper Gangetic Doab in the country round Karnal, Ambala, and Delhi, but which is commonly used as the *lingua franca* of India. It is capable of being written in both the Persian and Dev Nagri characters, and the excessive

use of Persian and Sanskrit words is generally avoided when it is used for literature. It now appears as the

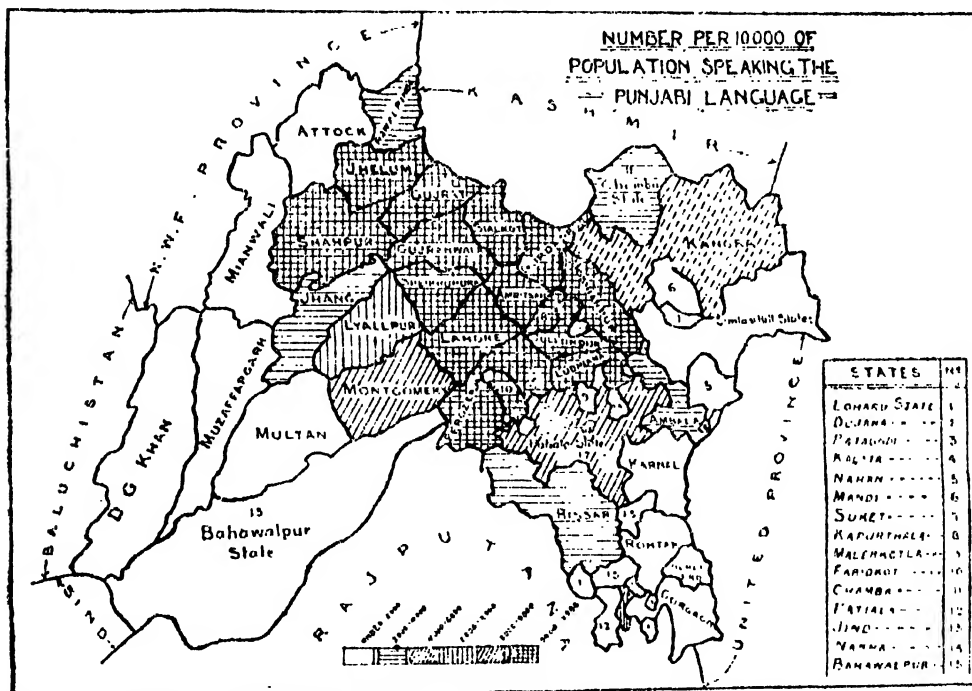
District.	HINDOSTANI.		URDU.	
	1911	1921	1911	1921
Hissar	1,070	183	7,585	14,840
Gurgaon	6,521	..	51,938	174,960
Delhi	329,835	104,180	161,427	309,020
Karnal	742,500	488,765	18,979	325,397
Ambala	435,086	2	2,568	407,560

speech of 624,410 persons or 92,889 less than in 1911. The decrease in the number of Hindostani speakers has occurred on account of the large number of persons having given their language as Urdu in the districts noted in the margin where it is supposed to be the spoken

language of the masses.

173. Urdu, according to Sir George A. Grierson, is that form of Hindostani in whose vocabulary Persian words (including Arabic) are of frequent occurrence, and can, therefore, only be written in the Persian character. The name is said to be derived from the Urdu-i-Muallah or Royal Military Bazar outside the Delhi Palace. Urdu has been returned at this census as the mother tongue of 1,610,070 persons (1,301,051 in the Punjab and 309,020 in Delhi) which shows a large increase over the figures (494,290) of 1911. The local distribution of Urdu is indicated by the map printed below. It is in fact the most widely spoken

Diagram 53.



of all the dialects of Western Hindi, being the speech of 52 and 633 *per mille* of the population in the Punjab and Delhi provinces respectively. There is not a single district or State where its speakers have not been registered. The increase in the strength of the Urdu-speaking population has been more or less general throughout the provinces. The districts and States showing notable increases

District and State.	1921	1911
Hissar	14,840	7,585
Rohtak	199,217	76,751
Gurgaon	174,960	51,938
Karnal	325,397	18,989
Ambala	407,560	2,568
Ferozepore	12,760	8,421
Montgomery	4,273	2,892
Multan	4,984	186
Nahar	8,345	3,627
Patiala	22,711	9,383
Delhi	309,020	161,427

in Urdu are given in the margin. The general increase has resulted chiefly from the distinguishing line between the two dialects Hindostani and Urdu becoming indeterminate in the course of years. Modern Urdu is less Persianised than it was some 30 or 40 years back, and can claim to fulfil the requirements of a *lingua franca* capable of being understood over the whole of the Delhi Province and a great part of the Punjab. In proof of the above fact the reader is referred to the writings of K. B. Sheikh

Abdul Qadir and the late Maulvi Nazir Ahmad which are remarkably free from

Arabic and Persian expressions. The other cause of this increase is found in the Urdu-Hindi-Punjabi controversy observed in 1911 which resulted in all Musalmans returning their language as Urdu, instead of Hindostani, as distinguished from Hindi, a word adopted by Hindus for denoting Hindostani spoken by them. The publication of Urdu books and newspapers has also influenced the Urdu figures to some extent. One may conclude that the strength of partisan sentiment, and the small linguistic difference between Urdu and Hindostani are largely responsible for the violent fluctuations from census to census of the recorded numbers of Urdu speaking persons; here if everywhere a decision must be reached not by the mere counting of heads but by the refined methods of analysis of ethnographic and linguistic scholarship.

District or State.		Decrease.
Simla	1,332	
Lahore	2,386	
Amritsar	2,600	
Sialkot	2,694	
Rawalpindi	13,756	
Pataudi	15,636	
Malerkotla	1,495	
Faridkot	1,453	
Nabha	6,113	

	1911	1921
Urdu	7,326	1,213
Hindi	68,819	75,256

the figures quoted in the margin will show. The other decreases do not require any special explanation.

in which important decreases have taken place during the past decade in Urdu figures. The decrease in Lahore and Pataudi seems to be due to the proper care exercised in the filling in of Language column of the schedule, because these two places were specially noted in 1911 for the inaccuracy, so far as the registration of Urdu was concerned. In Rawalpindi the decrease is due to the replacement of Urdu by Hindostani for causes unknown to the writer. In 1911 one person was returned as speaking Hindostani and 16,452 persons as speaking Urdu, while the present figures show 11,574 speaking Hindostani and 2,696 Urdu. In Nabha State where Musalmans are in minority, the decrease appears to be the natural result of Urdu, Hindi and Punjabi controversy, the name Hindi having been substituted for Urdu as

Other Hindi.

174. The entries classified under this head are Ahirwal, Ahirwati, Arya Bháshá, Bangar, Bangaru, Bhasha, Bhojwali, Brigashi, Brij Bháshá, Brijki, Deswáli, Dev Nágrí, Hariani, Hindi, Hirwai, Jati, Khadri, Nagri, Purbi, Ráná, Bháshá, Shástri, Shuáwati. Hindi pure can be called that form of Hindostan which contains Sanskrit words and hence can only be written in Dev Nagri characters. The chief dialects of Hindi spoken in these provinces are Jati, Deswáli, Bangri, Ahirwati, Hariani, and Purbi. The first five names represent the dialect spoken in the Bangar and Kadher tracts which is designated by various names according to locality and caste of the speakers. The tract on the west bank of the river Jumna in the districts of Karnal and Delhi is described in the linguistic survey as Khadir, while the Bangar tract extends right across the Karnal district into the State of Patiala and includes portion of Jind, Rohtak, and Gurgaon districts. Purbi was registered in almost every district or State, and is the dialect of immigrants from the United Provinces. The gain of 7,116 since 1911 in the Hindi-speaking population is due to the causes discussed under Urdu.

Rajasthani.

175. Rajasthani or the language of Rajputana has been returned by 713,761 persons (702,996 in the Punjab and 10,765 in Delhi) as against 725,850 in 1911. Its important dialects are Bagri, Marwari and Mewati whose strength is given in the margin. The other entries found in the sorters' tickets and classified under Rajasthani are detailed on the title page to Table X. Of these three main dialects Bagri and Mewati are the only indigenous languages of the provinces. The districts where Bagri is mostly used are Hissar (185,732), Gurgaon (60,278), Ferozepore (44,615), Loharu (20,232), Patiala (138,494), and Jind (2,567). Mewati is the spoken language of the Gurgaon district. Marwari is the language of Marwari immigrants or their descendants. In Delhi alone which is the chief trading centre it is returned for 9,274 persons. In Bahawalpur the figures 23,908 under this head are open to doubt and probably refer to Bagri.

	Punjab.	Delhi.
Bagri	459,996	1,487
Marwari	36,063	9,274
Mewati	206,178	4

176. Gujrati which is not a vernacular of the province appears in the returns as the language of 1,895 persons. All these are immigrants scattered over the provinces, the districts returning above 100 are named in the margin.

Lahore	..	..	582
Rawalpindi	..	..	283
Mianwali	..	..	110
Multan	..	..	239
Delhi	..	..	502

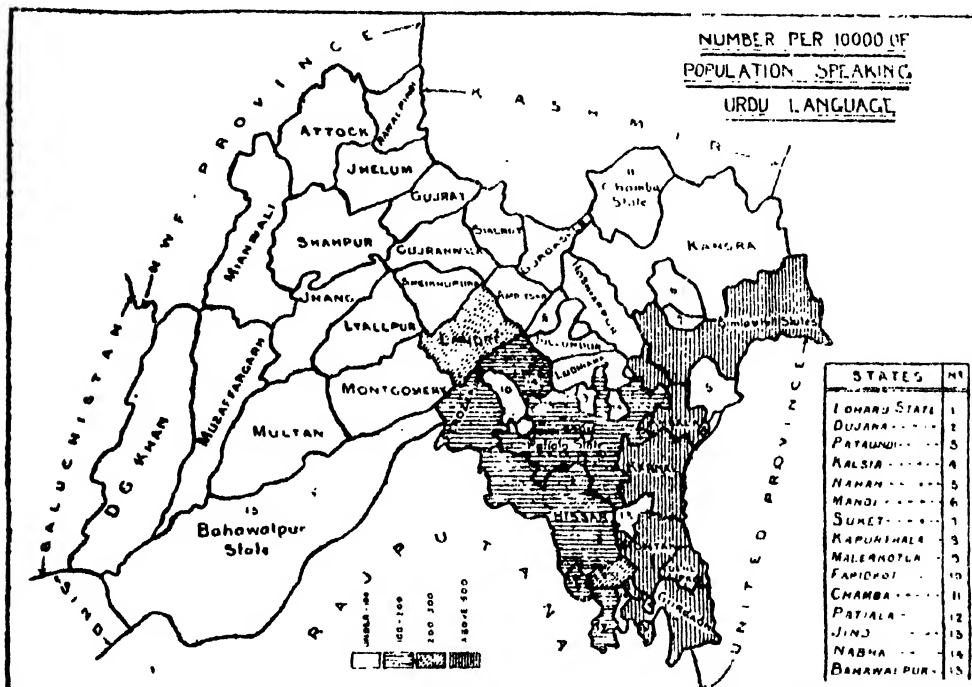
Gujrati.

177. Punjabi is the dominant language of the Punjab, and it is spoken over the greater part of the eastern half of the province with the exception of Simla Hill States and Kulu (district Kangra), where the language spoken is Pahari, and in the Ambala, Karnal, Hissar, Rohtak and Gurgaon districts where the language used is some form of Hindostani. It is now spoken by 15,215,120 persons (15,207,955 in the Punjab and 7,165 in Delhi) or nearly by 606 and 15 *per mille* of the population in the Punjab and Delhi, respectively. The map printed below indicates the distribution of Punjabi language by districts and States per 10,000 of the population.

Punjabi.

Map indicating the distribution of Punjabi Language.

Diagram 54



Its strength has increased by 7·8 per cent. since 1911. The districts and

Group.	District.	Increase.
1.	Hoshiarpur	13,067
	Jullundur	18,870
	Ludhiana	50,947
	Ferozepore	184,921
	Lahore	89,589
	Amritsar	51,240
	Shahpur	37,481
	Montgomery	57,812
	Lyallpur	64,783
	Bilaspur	4,658
	Kapurthala	17,092
	Patiala	102,797
	Jind	11,417
2.	Nabha	14,809
	Ambala	25,976
	Gujrat	78,899
	Rawalpindi	60,172
	Attock	90,428
	Mianwali	43,323
	Jhang	155,174
	Multan	17,788
	Faridkot	26,801
	Nalagarh	18,450
	Chamba	14,034

States showing considerable increases are grouped in the margin. In the places in group I the increase is more or less equal to the increase in the general population during the period 1911—1921. In Ambala and Faridkot the figures appear to have been exaggerated at the expense of Western Hindi, whose figures show a decrease of 28,279 speakers in Ambala and 2,210 in Faridkot. The figures of Gujrat have been effected by the transfer of considerable areas from the Shahpur district. In Rawalpindi, Attock, Mianwali, Jhang and Multan, it seems that probably Punjabi has been wrongly entered in place of Lahnda. The increase in Nalagarhi is accounted for by the proper classification of the dialect known as Nalagarhi, which is nothing but a species of Punjabi and quite different from Western Pahari. The abnormal increase in Chamba is attributable to wrong classification or mistakes at enumeration.

Important decreases have occurred in the strength of Punjabi speakers in the Kangra (219,433), Sialkot (38,406) and Jhelum (53,588) districts and Kalsia (11,413) and Nahan (4,755) States. In 1911 all persons in the Kangra district (except the Kulu Sub-division) were classed as speaking Dogri, a dialect of Punjabi: but at the present census no rigid geographical distinction was adopted, and the recorded number of Punjabi-speaking persons in Kangra has dropped from 7,955 per 10,000 in 1911 to 5,125 in 1921. Prior to 1911 only about 4 per cent. of persons are recorded as Punjabi speakers in the Kangra district, the remainder having been shown as speaking Pahari. The apparent decrease in Sialkot has resulted from the transfer of the major portion of Raya Tahsil to the Sheikhpura district. In Jhelum there has been a general decrease in the population, and also most of the population returned in 1911 as speaking Punjabi has been classified as Lahnda-speaking, in accordance with the Linguistic Survey. In Kalsia and Nahan States Punjabi speakers appear to have been erroneously enumerated as Hindi speakers.

Dialects
of Punjabi.

The two well-known dialects of Punjabi are Standard Punjabi and Dogri. The former is spoken in the plains of the Punjab and a portion of the neighbouring Simla Hill States, the latter chiefly in the Kangra district and in those parts of Sialkot, Gurdaspur and Chamba, which adjoin the Kangra district and Jammu State.

Standard
Punjabi.

178. The purest form of Standard Punjabi, according to Sir G. A. Grierson, is Manjha or Punjabi spoken by Jats of the Manjha, the Sikh tract of the Central Punjab north of the Sutlej. The different entries in the census schedules designating Standard Punjabi were Punjabi (14,795,309) Bilaspuri (627), Kahhuri (347), Malwai (104), Gurmukhi (26), Lahori (27), Jangli (1), and Nalagarhi (1). Kahhuri or Bilaspuri was returned by 605 persons in Mandi, and by 159 in Suket, while the dialect spoken in Bilaspur itself was returned as "Punjabi": Malwai sub-dialect of Punjabi was recorded in the Ferozepore district. Bilaspuri in censuses previous to 1911 was called Pahari, but now, as has just been observed, is shown as Punjabi. Gurmukhi, which is a script and not a dialect, appears as the spoken language of 22 persons in Gujrat and of 311 in Delhi.

Dogri.

179. The entries classed as Dogri are noted in the margin with their respective strength. The aggregate now returned under this head is 418,678 as against 757,375 in 1911. The largest decreases have occurred in Kangra (218,717), Gurdaspur (82,698), and Sialkot (51,634). The decrease in Kangra, as already explained in para. 177, is due to the classification under Western Pahari of some of the population which was shown in 1911 as speaking Dogri. In Sialkot and Gurdaspur no differentiation seems to have been made between Standard Punjabi and Dogri (the two dialects of Punjabi), and the word Punjabi was used for both these dialects: hence we find that there is no falling off in the total strength of persons returned as speaking Punjabi at the last two censuses.

Western
Pahari.

180. Western Pahari, according to Sir G. A. Grierson, is the Aryan language spoken in that part of sub-Himalaya, which extends from the Jaunsar Bawar tract of the district of Dehra Dun to Bhadarwah in the Northern Punjab. It is bounded on the East by Garhwali, on the North by the Tibeto-Chinese languages, on the South by Hindostani and Punjabi, and on the South-west by Dogri. Grierson holds that the speakers of Western Pahari are of mixed origin, the original inhabitants of this tract, the Khasa Gujjars, having been conquered and assimilated by Rajput immigrants from the south. Inter-marriage between Rajputs and Khasa Gujjars, and a fusion of the languages spoken by them formed the natural sequence of the invasion; and it is for this reason that Western Pahari and Rajasthani are akin.

The comparative statement in the margin shows the number of persons speaking dialects of the five groups, viz., (a) Simla Group, (b) Kulu Group, (c) Mandi Group, (d) Chamba Group, and (e) others, into which Western

Census.	Total.	(a) Simla Group.	(b) Kulu Group.	(c) Mandi Group.	(d) Chamba Group.	(e) Others.
1921	1,097,021	427,710	126,703	237,934	139,262	165,322
1911	933,363	405,008	122,970	237,377	136,138	91,870

Pahari was divided at this and the last censuses. It is now spoken by 1,097,021 persons, or 44 *per mille* of the total population as against 933,363 in 1911. The figures of the present census show an increase of 115,518 or 14 per cent. excluding

the figures in group (e) over the estimated figures (816,181) for 1891 given in the linguistic survey for the above four groups, while the increase in population in Nahan, Jubbal, Bhagal, Keonthal, Kulu, Mandi, Suket and Chamba, where Western Pahari is chiefly spoken, is about 23 per cent. since 1891. The difference between these two percentages is due to the classification of some of the Pahari entries belonging to these four groups under "others" for want of the specification of the dialects to which they belonged.

181. The Simla group consists of a number of dialects and sub-dialects Simla group.

Kochi	..	..	62,172
Keonthali	..	..	62,013
Sirmuri	..	..	56,082
Bhagli	..	..	18,804

detailed on the title page to Table X. Figures of the important dialects are given in the margin for the present census. Kochi is chiefly spoken in the

Bashahr State, where 60,678 persons speaking this dialect were enumerated, the other places where its speakers were noted being Keonthal (166), Bhagal (804), and the Minor Simla Hill States (524). Keonthali is spoken in the Keonthal State and the central portion of the States round the Simla district. It was returned by 28,239 persons in Keonthal, and by (23,752) persons in Bhagal. In other places the largest figures (9,611) were noted in the Minor Simla Hill States. Sirmuri is the languages of Sirmur or Nahan, and that part of the Jubbal State which adjoins Nahan, while Bhagli is confined to Bhagal and Kunihar States.

182. The dialects included in the Kulu group are Koli, Kuluhi, and Kulu group.
Kulu-Suraji. These dialects are chiefly spoken in Kulu proper and the number of their speakers has risen from 122,970 in 1911 to 126,793 in 1921.

183. The Mandi group includes Mandiali and Suketi, which are the Mandi
languages of Mandi and Suket States, and a few entries of Mandi, Suraji and group.
Naraingarhi. This group is now represented by 237,934 persons.

184. This group comprises the dialects known as Bhadarwahi, Bhar- Chamba
mauri, Chamiali, Chambiali, Churahi, and Gadi, which were recorded mostly in group.
the Chamba State.

Northern Group.

185. The term Central Pahari denotes a group of dialects spoken in Central
Ambala 9 Kamaun and Garhwal in the United Provinces. The Pahari
Simla 176 strength is shown in the margin. Among the States (Garhwal).
Kangra 46
Hoshiarpur 18
Rawalpindi 18
Mianwali 1
Multan 6
Punjab States 756
Delhi 53
the largest figures come from Keonthal (169) and Jubbal (289) where the number of immigrants from Garhwal and Teri Garhwal was 160 and 215 respectively.

186. Eastern Pahari commonly known as Naipali or Gorkhali, is the Eastern
Aryan language spoken in the State of Nepal. At this census, it was returned Pahari
by 9,301 persons (9,243 in the Punjab and 58 in Delhi) while in 1911 its speakers (Nepal).
numbered 8,653. The increase is probably due to the increase in the number of Gurkha soldiers employed during the decade. The places returning figures of Naipali speakers above 100 are Kangra (2,236), Lahore (566), Gurdaspur (2,581), Rawalpindi (2,591), Nahan (256), Mandi (197), and Chamba (461).

187. The figures for Gypsy dialects represent a decrease of 9,615 as compared with the 1911 figures but the returns are doubtful, as was noted in the opening paragraph of this chapter. It is true that most of the members of castes such as Bawaria, Sansi, can understand the Punjabi language, but their mother-tongue has undergone very little change. Of the Gypsy dialects enumerated at the present census the most important is Odki spoken by 2,516 members of the "Od" tribe. The Ods are nomads who usually wander about with their families in search of employment on earth-work, often taking with them enormous herds of sheep and goats. Gypsy
Dialects.

Other Languages.

188. The speakers of other Asiatic languages aggregate 1,793 as against Asiatic
2,745 in 1911 in both the provinces. The general falling off under this head is Languages.
due to the decrease of 685 persons speaking Persian. Arabic has been returned by 45 persons in the Punjab and by 8 in Delhi, but it is not clear whether some of those who have given their language as Arabic are merely Arabic scholars or genuine Arabs.

Non-Asiatic
Languages.

189. English is the only important non-Asiatic language being spoken by 26,829 persons in the Punjab and 4,614 in Delhi. Out of the total of 31,728 persons enumerated as speaking the languages of this group, English speakers now represent 1 and 10 *per mille* of the population of the Punjab and Delhi provinces, respectively. The strength of the language is 202 more than the total number of Europeans, Armenians and Anglo-Indians given in Imperial Table XVI : but for this comparison, 285 persons have to be added who returned other European languages, which means an excess of 485 persons. The excess is explained by the fact that well-educated Indians and Indian-Christians have begun to use English in their homes. The distribution of the English language by districts and States depends mainly upon the presence of military cantonments and big official and business concerns. Hence we find that greatest number of English speakers (6,706) is returned from Rawalpindi where a big cantonment is located. The next in importance are Lahore and Delhi with 4,991 and 4,614 English speakers, both of these places being the Headquarters of the respective provincial Governments. The detail of other languages returned under this head is as follows :—

Portuguese (211), French (18), Dutch (3), Flemish (20), German (1), Greek (12), Irish (8), Italian (11), and Russian (1).

Miscellaneous.

Remarks
about
Linguistic
boundaries.

190. In the Punjab and Delhi provinces, generally speaking, there are no fixed natural boundaries of the kind described in the linguistic survey for the different languages and reproduced in the discussion about each language in this chapter, which act as insuperable barriers to language. The boundaries of language are nebulous and indeterminate, and there is no sharp transition as we pass from one locality to the adjacent one. The result is that any attempt at a demarcation of boundaries is apt to be misleading, because different dialects shade off one into another so gradually that it is not always possible to say that dialect A belongs to one language and dialect B to another. It is for this reason that the native of one part of the Punjab can express himself and be understood in another. There are many words and expressions common to the different dialects of the province. The dialects differ from each other in vocabulary rather in grammar and they are, in fact, nothing but variants of the main language as spoken by the different classes, castes or tribes or in different localities.

The Influence
of Education
on local
dialects.

191. Education has done little to obliterate local dialects but in so far as literacy in English has increased owing to its use as a medium of instruction, the incorporation of English words and phrases has, in many instances, led to uncouth and hybrid forms of speech. Thus though well-educated Indians with a few notable exceptions still speak the dialects they always spoke, yet it is common to find them using a certain proportion of English and other foreign words in their conversation. Indians use English words and phrases not only when talking to an Englishman, but also to each other; this does not, however, mean that local dialects are not developing in a natural way. The use of foreign words is not confined to Indian languages but such borrowing occurs in every language. It is thus clear that education has so far tended very little, during the past 30 or 40 years, to the unification of languages, and it is unlikely that local dialects will disappear whether we adopt English, Urdu, Hindostani or Punjabi as the medium of Primary Education. At present a boy, who is educated at a school where Urdu is the medium of instruction, does not only not speak Urdu at his home, but never cares to keep his knowledge of it alive after he leaves school. This argument is sufficient to take much of the sting out of the controversy which has raged over the merits and demerits of Hindi, Urdu or Punjabi as the medium of instruction in Primary Schools.

Literary
activity in
different
languages.

192. The number of newspapers and periodicals has risen from 74 in 1891, 166 in 1901, 229 in 1911 to 270 in 1921. Of these 270, 45 are written in English, 181 in Urdu, 27 in Gurmukhi, 13 in Hindi, and 4 in mixed languages. The above figures show that Urdu is the most popular medium for the circulation of news, the number of Urdu papers having increased from 64 to 181 during the past 3 decades. There is a great deal of literary activity in other languages which indicates the general awakening among the masses. Many periodicals are of

a communal character, and these generally deal with matters concerning the community in the interests of which they are founded. The comparative statement below shows the increase in the number of newspapers of different languages, since 1891—

Year.				Total.	English.	Urdu.	Gurmukhi.	Hindi.	Bilingual.
1891	..	..	..	74	4	64	1	3	2
1901	..	..	..	166	17	135	5	7	2
1911	..	..	..	229	25	177	17	9	1
1921	..	..	..	270	45	181	27	13	4

These figures, however, somewhat exaggerate the journalistic success, if not the journalistic enterprise of the province, and at the moment of writing (March 1923) the number of “live” papers circulating in the Punjab is only 236, including dailies, weeklies and other periodicals.* Most of these publications have a circulation of under 2,000 copies, the actual total circulation as

Circulation of the Newspapers and Periodicals in the Punjab in 1921.

Dailies	..	..	113,072
Weeklies	..	..	159,680
Monthlies	..	..	95,170
Others	..	..	26,371

reported for 1921 being given by the figures in the margin. The total circulation of daily papers only amounts to one for every 222 persons in the province. This suggests an ignorance of and indifference to public events and contemporary public opinion, which is far from being the case. Actually for every paper printed

or sold there are 20 persons who read its contents, or listen to it being read in the street of the smaller towns, or in the “chaupals” of the larger villages, and the men who listen will in their turn pass on it at least a part of the news to their women folk, or to friends and relations when visiting villages remote from lines of railway or off the main routes.

The number of books published during the decade 1912–1921, inclusive, and the languages in which they were published are shown in the margin. The details are given for each year since 1912 to 1921 in Subsidiary Table III. Over two-thirds of the total number of books published in the Punjab are in either Urdu or Punjabi; English books form about 10·5 per cent.

of the books published. English seems to have lost ground since 1918 when books in English were nearly 15 per cent. of the whole, but the rise in 1915–1918 was clearly only a circumstance arising from the war, and compared to the pre-war years English more than holds its own.

* The only illustrated paper published at present in the Punjab is “The Nation,” which is written in English and has a Sunday supplement.

I. Distribution of total population by language according to Census. II. Distribution by language of the population of each district. III. Showing the number of books published annually in each language from 1911 to 1921.

SUBSIDIARY TABLE I.

Distribution of total population by language.—according to Census.

Language (with main heads given in Sir George Grierson's classified scheme).	TOTAL NUMBER OF SPEAKERS (000's OMITTED).				NUMBER per mille OF THE POPULATION.		Where chiefly spoken.
	Punjab.	Delhi.	Punjab and Delhi.		Punjab.	Delhi.	
			1921.	1911.			
1	2	3	4	5	6	7	8
TOTAL	25,101	488	25,589	24,188	..	..
PART I—INDIAN LANGUAGES.							
I.—TIBETO-CHINESE FAMILY							
Tibeto-Burman Sub-Family ..	38	..	38	42	2	..	
Tibeto-Himalayan branch ..							
(a) <i>Tibetan Group</i> ..	9	..	9	11	1	..	
1. Tibetan ..	5	..	5	5	1	..	Simla, Kangra, Gurdaspur, Keonthal, Mandi, Patiala and Bahawalpur.
2. Bhotia (others) ..	4	..	4	6	..	..	Kangra.
3. Others ..	..	..	..	..	..	..
(b) <i>Pronominalized Himalayan Group</i> ..	29	..	29	31	1	..	
<i>Western Sub-Group</i> ..							
1. Kanauri ..	22	..	22	23	1	..	Bahawalpur.
2. Patni ..	..	..	..	5	..	..
3. Ranglois ..	..	..	..	1	..	..
4. Lahuli ..	7	..	7	1	..	..	Chamba and Kangra.
5. Bunan or Gahri ..	..	..	..	1	..	..
II.—INDO-EUROPEAN FAMILY							
Aryan Sub-family ..	25,031	483	25,514	24,095	997	990	
(1) <i>Eranian Branch</i> ..							
<i>(Eastern Group)</i> ..	116	..	116	138	5	..	
1. Balochi ..	57	..	57	71	2	..	Dera Ghazi Khan and Bahawalpur.
2. Pushto ..	59	..	59	67	3	1	Rawalpindi, Attock, Mianwali and Dera Ghazi Khan.
(2) <i>Indian Branch</i> ..							
<i>Non-Sanskritic Sub-branch</i> ..	24,915	483	25,398	23,957	992	989	
Kashmiri ..	5	..	5	7	..	..	Simla, Kangra, Lahore, Amritsar, Gurdaspur, Rawalpindi, Gujranwala and Chamba.
<i>Sanskritic Sub-branch</i> ..	24,910	483	25,393	23,950	992	989	
(a) <i>North-Western Group</i> ..	4,323	..	4,323	4,278	172	..	
1. Lahnda or Western Punjabi ..	4,303	..	4,303	4,254	171	..	Lahore, Shahpur, Jhelum, Rawalpindi, Attock, Mianwali, Montgomery, Lyallpur, Jhang, Muzaffargarh, Dera Ghazi Khan and Bahawalpur.
2. Sindhi ..	20	..	20	24	1	..	Lahore, Multan and Bahawalpur.
(b) <i>Southern Group</i> ..	4	2	6	1	..	4	
1. Marathi ..	1	..	1	1	..	..	Ambala.
2. Others ..	3	2	5	..	..	4	
(c) <i>Eastern Group (Bengali)</i> ..	2	3	5	2	..	6	Lahore, Simla, Rawalpindi and Delhi.
(d) <i>Western Group</i> ..	20,571	473	21,049	19,659	820	979	
1. Western Hindi ..	3,561	459	4,020	3,827	142	941	Ambala Division, Ferozepore, Lahore, Rawalpindi, Sialkot, Dujana, Pataudi, Kalsia, Nahan, Patiala, Jind, Nabha and Delhi.
(1) Hindustani ..	520	104	624	1,554	21	213	Karnal, Rawalpindi, Lahore and Delhi.
(2) Urdu ..	1,301	309	1,610	494	52	633	Rohtak, Gurgaon, Karnal, Ambala and Delhi.
(3) Other Hindi ..	1,740	46	1,786	1,779	69	95	Hissar, Rohtak, Gurgaon, Karnal, Kalsia, Nahan, Jind, Nabha and Delhi.
2. Rājasthani ..	703	11	714	726	28	22	Hissar, Gurgaon, Ferozepore, Loharu, Patiala and Bahawalpur.
(1) Bāgri ..	460	2	462	468	18	3	Hissar, Gurgaon, Ferozepore, Loharu, Patiala and Jind.
(2) Mārwarī ..	36	9	45	46	2	19	Bahawalpur.
(3) Mewāti ..	206	..	206	209	8	..	Gurgaon.
(4) Others ..	1	..	1	3	..	..

SUBSIDIARY TABLE I.

Distribution of total population by language.—According to Census—concluded.

Language (with main heads given in Sir George Grierson's classified scheme).		TOTAL NUMBER OF SPEAKERS (000'S OMITTED).				NUMBER <i>per mille</i> OF THE POPULATION.		Where chiefly spoken.
		Punjab.	Delhi.	Punjab and Delhi.		Punjab.	Delhi.	
		1921.	1921.	1921.	1911.			
1		2	3	4	5	6	7	8
3. Gujrātī .. ..	..	2	1	3	2	..	1	Lahore, Rawalpindi, Multan and Delhi.
4. Punjabi .. ..	..	15,208	7	15,215	14,111	696	15	Hissar, Ambala, Jullundur, Lahore Division, Gujrat, Shahpur, Jhelum, Montgomery, Lyallpur, Kalsia, Bilaspur, Nalagarh, Kapurthala, Malerkotla, Faridkot, Phulkian States and Bahawalpur.
1. Standard .. ..	..	14,789	7	14,796	13,354	589	15	Hissar, Ambala, Jullundur and Lahore Divisions except Kangra, Gujrat, Shahpur, Jhelum, Montgomery, Lyallpur, Kalsia, Bilaspur, Nalagarh, Kapurthala, Malerkotla, Phulkian States and Bahawalpur.
2. Dogri .. ..	..	419	..	419	757	17	..	Kangra, Gurdaspur, Sialkot and Chamba.
5. Western Pahāri .. ..	..	1,097	..	1,097	993	44	..	Kangra, Simla Hill States and Nabha.
(a) Simla Group .. ..	..	428	..	428	405	17	..	Kangra, Simla Minor Hill States and Mandi.
(b) Kulu Group .. ..	..	127	..	127	123	5	..	Mandi and Suket.
(c) Mandi Group .. ..	..	238	..	238	237	9	..	Chamba and Kangra.
(d) Chamba Group .. ..	..	139	..	139	136	6	..	Simla, Kangra, Gurdaspur, Rawalpindi, Chamba, Simla Hill States, Nahan and Mandi.
(e) Others .. ..	..	165	..	165	92	7	..	..
(c) Northern Group .. ..	..	10	..	10	10	..	..	..
1. Central Pahāri .. ..	..	1	..	1	1	..	..	Simla, Keonthal, Simla Minor States.
2. Eastern Pahāri .. ..	..	9	..	9	9	..	..	Kangra, Gurdaspur and Rawalpindi.
III.—UNCLASSIFIED LANGUAGES.		3	..	3	12	..	..	..
1. Bāwaria .. ..	..	..	..	..	4	..	..	..
2. Odki .. ..	..	3	..	3	5	..	..	..
3. Labani .. ..	..	..	..	..	2	..	..	..
4. Others .. ..	..	..	..	..	1	..	..	..
PART II.—OTHER LANGUAGES.								
INDO-EUROPEAN FAMILY ..		29	5	34	39	1	10	..
(a) Iranian Group (Persian) ..	..	2	..	2	3	..	..	Lahore, Ludhiana and Rawalpindi.
(b) Teutonic Group (English) ..	..	27	5	32	36	1	10	Ambala, Simla, Jullundur, Ferozepore, Lahore, Sialkot, Rawalpindi, Multan and Delhi.

SUBSIDIARY TABLE II.

Distribution by language of the population of each district.

DISTRICT OR STATE AND NATURAL DIVISION.	NUMBER PER 10,000 OF THE POPULATION SPEAKING											
	Punjabi.	Lahnda.	Western Hindi.				Western Pahari.	Rajasthani.	Balochi.	Pashto.	English.	Others.
			Total.	Urdu.	Hindustani.	Other Hindi.						
1	2	3	4	5	6	7	8	9	10	11	12	13
PUNJAB	6,059	1,714	1,419	519	207	693	437	280	23	23	11	24
INDO-GANGETIC PLAIN WEST	6,791	6	2,562	736	439	1,387	36	584	..	5	7	9
1. Hissar ..	2,334	1	5,355	182	2	5,171	..	2,308	..	..	1	1
2. <i>Loharu State</i> ..	..	..	188	188	..	..	1	9,811	..	..	..	..
3. Rohtak ..	8	..	9,983	2,580	..	7,403	..	8	..	..	1	..
4. <i>Dujana State</i> ..	..	..	10,000	10,000	..	..	..	..	..	..	..	..
5. Gurgaon ..	11	..	6,082	2,565	..	3,517	..	3,904	..	..	2	1
6. <i>Palauli State</i> ..	10	..	9,990	2,166	..	7,834	..	..	..	..	..	..
7. Karnal ..	121	..	9,872	3,927	5,898	47	..	5	..	1	..	1
8. Jullundur ..	9,888	..	98	81	3	14	..	..	..	2	10	2
9. <i>Kapurthala State</i> ..	9,981	..	16	12	1	3	..	1	..	..	1	1
10. Ludhiana ..	9,920	..	67	49	4	14	..	8	..	..	1	4
11. <i>Malerkotla State</i> ..	9,968	..	31	24	4	3	..	..	..	..	1	..
12. Ferozepore ..	9,334	..	230	116	35	79	..	419	..	2	13	2
13. <i>Faridkot State</i> ..	9,825	..	57	37	..	20	..	111	..	5	1	1
14. <i>Patiala State</i> ..	8,634	..	177	151	8	18	259	926	..	..	2	2
15. <i>Jind State</i> ..	1,904	..	7,992	240	5	7,747	1	97	..	1	4	1
16. <i>Nabha State</i> ..	7,081	..	2,904	46	..	2,858	1	12	..	..	..	2
17. Lahore ..	9,366	57	413	311	48	54	14	10	..	33	41	63
18. Amritsar ..	9,923	..	53	40	3	10	6	3	..	..	6	9
19. Gujranwala ..	9,927	5	51	37	8	6	1	4	..	5	2	5
20. Sheikhupura ..	9,883	1	85	44	31	10	..	9	..	12	1	9
HIMALAYAN	3,406	1	267	85	3	179	6,038	1	..	4	20	263
21. <i>Nahan State</i> ..	588	..	2,611	594	..	2,017	6,768	7	..	1	1	21
22. Simla ..	999	1	1,413	1,234	24	155	6,514	12	..	8	682	371
23. <i>Simla Hill States</i> ..	1,804	8	29	9	2	18	7,233	1	..	1	3	921
24. <i>Bilaspur State</i> ..	9,965	..	1	1	..	..	33	..	..	..	..	1
25. Kangra ..	5,135	..	30	4	6	20	4,645	..	..	0	2	182
26. <i>Mandi State</i> ..	166	..	3	1	..	2	9,793	..	..	1	8	29
27. <i>Suket State</i> ..	219	..	2	1	1	..	9,967	..	..	..	..	2
28. <i>Chamba State</i> ..	2,075	..	8	7	..	1	7,846	..	..	8	1	62
SUB-HIMALAYAN	7,666	1,399	850	721	23	106	10	1	..	37	21	16
29. Ambala ..	3,821	..	6,110	5,980	..	130	8	3	..	3	40	12
30. <i>Kalsia State</i> ..	1,716	..	8,277	21	1	8,255	..	5	..	1	..	1
31. Hoshiarpur ..	9,987	..	11	7	2	2	..	..	..	..	1	1
32. Gurdaspur ..	9,900	..	43	23	1	19	9	4	..	1	4	39
33. Sialkot ..	9,916	..	58	48	1	9	..	3	..	1	20	2
34. Gujrat ..	9,950	1	43	33	6	4	..	..	..	3	1	2
35. Jhelum ..	9,503	471	17	13	1	3	1	..	..	4	2	2
36. Rawalpindi ..	2,460	6,953	289	48	203	38	78	2	..	22	118	78
37. Attock ..	1,803	7,781	26	5	18	3	..	..	..	380	8	2
NORTH-WEST DRY AREA	3,894	5,725	141	37	7	97	1	55	94	52	4	34
38. Montgomery ..	8,175	1,644	103	60	19	24	..	39	1	35	1	2
39. Shabpur ..	9,670	266	48	34	..	14	..	1	..	13	1	1
40. Mianwali ..	1,278	6,855	1,310	52	12	1,246	..	3	..	539	7	8
41. Lyallpur ..	6,998	2,846	111	53	5	53	5	23	..	15	1	1
42. Jhang ..	3,213	6,730	41	3	2	36	..	2	..	13	..	1
43. Multan ..	556	9,284	93	56	17	20	..	29	..	11	19	8
44. <i>Bahawalpur State</i> ..	1,528	7,851	65	43	..	22	..	319	12	6	1	218
45. Muzaffargarh ..	43	9,913	20	4	..	16	..	7	..	12	4	1
46. Dera Ghazi Khan ..	27	8,697	2	2	..	..	..	2	1,130	94	..	48
DELHI	147	..	9,418	6,330	2,132	951	9	221	..	7	95	108
INDO-GANGETIC PLAIN WEST	147	..	9,418	6,330	2,132	951	9	221	..	7	95	108
1. Delhi ..	147	..	9,413	6,330	2,132	951	9	221	..	7	95	108

SUBSIDIARY TABLE III.

Showing the number of books published annually in each language from 1911 to 1921.

Language.		1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	Total 1912-1921.	REMARKS.
1.	English	78	112	125	171	219	187	222	254	193	185	158	1,826	
2.	Arabic	22	19	7	27	14	25	17	30	42	52	58	291	
3.	Bruhi .. ..	..	..	..	..	..	6	..	..	..	..	..	6	
4.	Sanskrit	7	6	4	6	10	17	8	5	9	8	13	86	
5.	Persian	15	9	15	22	17	18	11	19	11	15	19	156	
6.	Urdu	691	691	532	964	621	660	565	558	468	649	671	6,282	
7.	Punjabi	504	523	697	704	571	543	550	591	482	715	786	6,162	
8.	Hindi	68	75	52	62	73	70	100	84	76	73	83	748	
9.	Sindhi	18	13	34	25	14	29	15	9	13	5	5	162	
10.	Multani	6	6	2	2	12	2	6	5	7	3	7	53	
11.	Pashto	8	7	13	18	2	2	2	1	..	4	5	54	
12.	Kashmiri	15	7	..	9	1	2	1	3	..	..	1	24	
13.	Lande .. ..	..	..	..	..	..	1	..	1	..	1	2	5	
14.	Mandiali (Hill Dialect) .. ..	..	..	..	..	1	1	..	..	1	..	1	4	
15.	Khowar .. ..	..	..	..	..	..	..	..	..	..	..	1	1	
16.	Prakrit .. ..	..	..	..	..	..	..	..	1	..	..	..	1	
17.	Bilingual	115	142	145	178	148	164	132	128	90	107	120	1,364	
18.	Trilingual	15	20	15	29	13	19	14	10	10	28	16	171	
19.	Polyglot	3	2	1	3	2	5	3	..	1	3	1	21	
Total		1,565	1,532	1,642	2,221	1,721	1,751	1,646	1,699	1,403	1,848	1,947	17,410	

CHAPTER X.

Infirmities.

SECTION I.—GENERAL.

194. Reference to statistics. 194. Instructions to enumerators. 195. Variation since 1881.

INSANITY.

196. Local distribution. 197. Age-distribution. 198. Lahore Lunatic Asylum.

DEAF-MUTISM.

200. Local distribution. 200. Age-distribution.

BLINDNESS.

201. Local distribution. 202. Age-distribution.

LEPROSY.

203. Local distribution. 204. Age-distribution.

SECTION II.—CONSANGUINITY.

205. Comparative extent of infirmity among Hindus and Musalmans. 206. Deaf-mutism. 207. Albinism.

Section I.—General.

Reference
to statistics.

193. As at previous censuses the data regarding only four infirmities were recorded. These were insanity, deaf-mutism, blindness and leprosy. The statistics relating to these infirmities are given in Imperial Tables XII and XII-A and in six Subsidiary Tables.

Imperial Table XII gives the distribution of the various infirmities by age and sex for the Punjab, British Territory, Punjab States and Delhi separately. Unfortunately this table contains some serious errors which were only discovered after the tables had been finally printed, and it has not been possible at this stage to do more than note in the text below some of the corrections which are required.

Imperial Table XII-A gives the distribution of infirmities for castes, tribes or races, and single infirmities only are dealt with.

The information contained in the Subsidiary Tables is as follows:—

Subsidiary Table I gives the number of afflicted persons per 100,000 of the population at each of the last 5 censuses for each district, State and Natural Division.

Subsidiary Table II gives the age-distribution of the infirm per 10,000 infirm persons of each sex for the Punjab and Delhi separately, and for the Punjab and Delhi together for each of the last 5 censuses.

Subsidiary Table III gives the number of afflicted persons for each age-period per 100,000 of each sex, as well as the number of females afflicted per 1,000 males.

Subsidiary Table IV gives the population and number of infirm persons for certain distinctively Hindu, Sikh and Musalman castes.

Subsidiary Table V gives the proportions of infirm persons among Hindus and Musalmans, the difference of these proportions, and the ratio of this difference to its standard error.

Subsidiary Table VI shows the number of persons by sex suffering from single and dual infirmities, and must be taken to replace the legend of Imperial Table XII, and to correct *pro tanto* the contents of that table.

Subsidiary Table VII is a list of certain Albinos in the Punjab, 1923.

Instructions
to enumera-
tors.

194. The instruction printed on the cover of the enumeration book was as follows:—

“Column 16 (Infirmities).—If any person be blind of both eyes, or insane, or suffering from corrosive leprosy, or deaf and dumb, enter the name of the infirmity in this column. Do not enter those who are blind of one eye only, or who are suffering from white leprosy only.”

The further instruction contained in Appendix I of the supplementary instructions to Supervisors contains the following entry :—

"Column 16.—Care is needed to prevent the entry of persons suffering from leucoderma or white leprosy and other infirmities not falling within the scope of column 16.

Persons blind of one eye should not be entered. Only those totally blind of both eyes should be included. A man must be both deaf and mute in order to be included in this column."

These instructions are practically identical with those issued in the censuses of 1901 and 1911 except that with regard to deaf-mutes the enquiry was only restricted to those born deaf and dumb.*

Dual infirmities were recorded ; but, in no instance was any person shown as suffering from triple infirmities. The complete table of single and dual infirmities, so far as it can be reconstructed by the help of the legend on Imperial Table XII, is given in Subsidiary Table VI, and this shows that the number of persons suffering from single and dual infirmities is greater than that shown in the Imperial Table. It is not necessary to discuss here how the error arose.

195. Variation in the number of the infirm per 100,000 of the total population since 1881 is exhibited in the table in the margin. There is probably no significant change in the proportions of these infirmities during the last decade ; but looking to the figures in all 5 censuses together, there seems to be a general tendency for a decrease of recorded infirmities during the last 10 years. Considerations of time prevent the application of the proper statistical criteria for these apparent differences, and without such tests it would be unwise to regard any of the changes as indicative of fundamental improvement.

VARIATION IN THE NUMBER OF THE INFIRM PER 100,000 SINCE 1881.

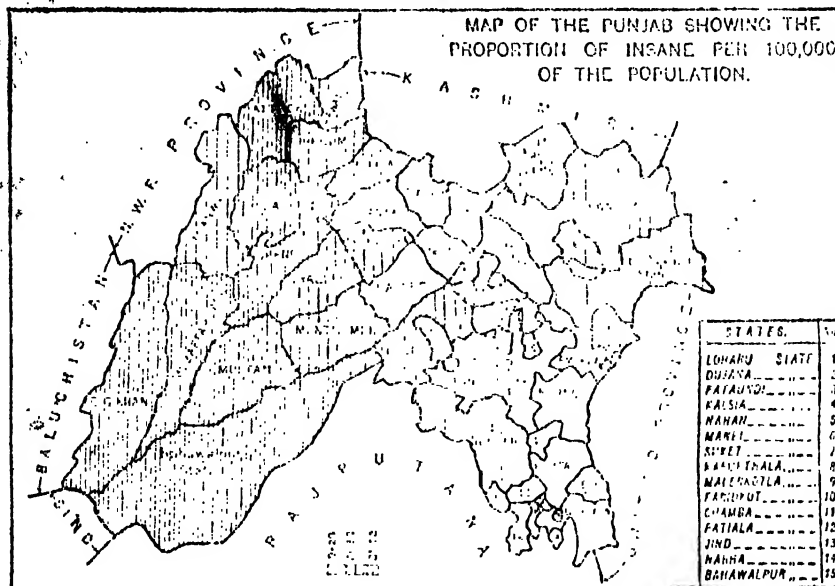
Infirmity.	Punjab Province.					Delhi.
	1921.	1911.	1901.	1891.	1881.	1921.
Total ..	389	377	439	504	714	190
Insane ..	28	26	35	29	48	16
Deaf-mutes ..	90	84	80	98	122	33
Blind ..	260	254	305	351	529	140
Lepers ..	11	13	19	26	15	2

Variation since 1881.

Insanity.

196. The local distribution of insanity in the Punjab and Delhi is shown in the diagram below. This shows the frequency of the disease in three groups, Local distribution.

DIAGRAM 55.

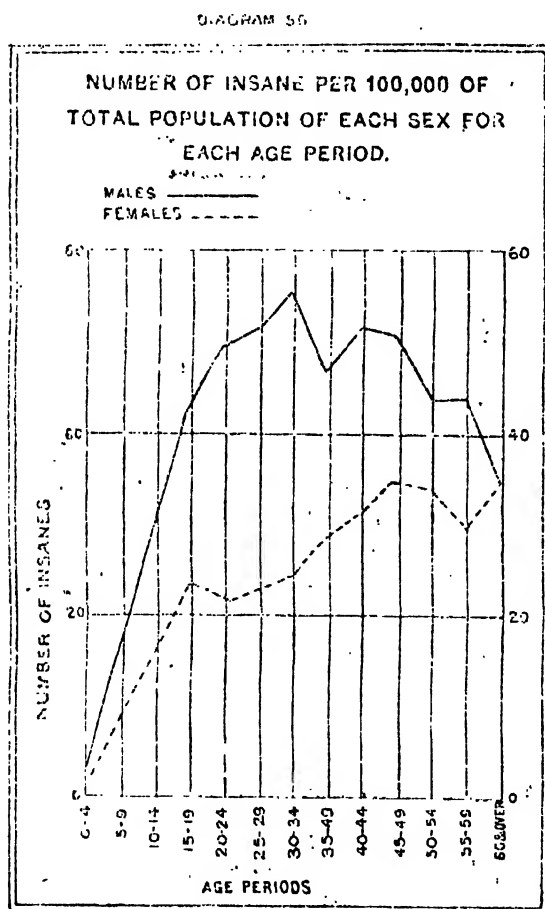


*According to the Rev. Arnold Hill Payne (vide article Deaf and Dumb, Encyclopædia Britannica, Vol. VII, 11th edition), dumbness in the true sense of the word does not exist, and he would attribute all cases of deaf-mutism to congenital deafness which has prevented the sufferer from attempting to speak. The classification of Doctor Edward M. Gallaudet, of deaf-mutes into the speaking-deaf, the semi-speaking-deaf, the mute-deaf, the speaking-semi-deaf, the mute-semi-deaf, the hearing-mute and the hearing-semi-mute, seems more rational although if the Rev. Hill Payne is right, no hearing mutes exist.

namely for those districts in which there are less than 20 insane persons per 100,000 of population, those districts in which there are between 21 and 30 insane persons per 100,000 of population, and lastly those districts containing over 30 insane persons, per 100,000 of population. In the preparation of this diagram the figures of Lahore lunatic asylum have been excluded, as it was not possible to refer all the inmates to their districts of birth. It appears that the Central Punjab is more free from insanity than either the Western or the North-Eastern Punjab. The light thrown on the probable causation of insanity by the variation in local distribution is discussed by Rai Bahadur Pandit Hari Kishen Kaul, in paragraph 498 of the Census Report of 1911, but he has not mentioned in this connection the only predisposing cause which is likely to afford an explanation of the moderate to high frequency of insanity in the hills, to wit the existence of hereditary syphilis, known to be prevalent in those regions. In considering the possible effects of consanguinity on the inheritance of the insane diathesis Pandit Hari Kishen Kaul rightly points out that cousin marriage cannot be the sole cause as Hindus do not contract such alliances. The problem is further examined in Section II of this chapter in the present report.

Age-distribution.

197. Diagram 56 given in the margin shows the number of insane persons



per 100,000 of the total population for each sex of each quinquennial age-period, the figures for which are given in Subsidiary Table III at the end of this chapter. The curve for males shows a steady increase up to 34 years after which there is an irregular decrease. As insanity is not often cured in the Punjab, the age-curve indicates that after the age of 34 mortality among insane males is greater than that among the population at large. Amongst females the most rapid increase is shown from the ages of 0—19: and there is also a somewhat notable increase among the older females which may be associated with the hardships to which women in the Punjab who have passed the child-bearing age are subjected.

Lahore
Lunatic
Asylum.

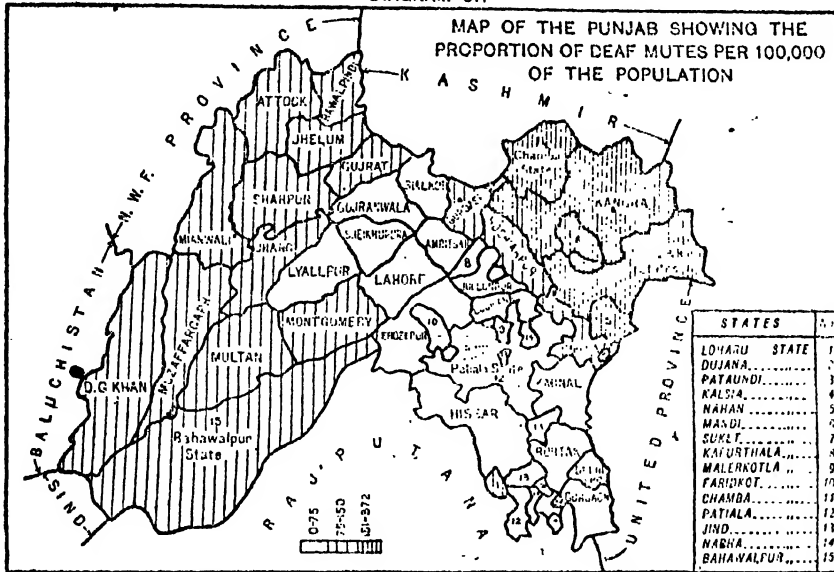
198. The only lunatic asylum in the Province is situated in Lahore, and the figures for inmates both male and female for the 10 years 1912—1921 are shown in the margin. The increasing popularity of the institution rather than any increase in insanity in the general population is indicated by the figures. It seems probable that the common people do not suffer fools as gladly as they did in the past, and are more ready to hand over their insane relatives to proper medical supervision.

Year.	Males.	Females.	Total.
1912	540	143	683
1913	571	156	727
1914	581	161	742
1915	618	172	790
1916	651	161	812
1917	703	172	875
1918	704	168	872
1919	694	163	857
1920	707	147	854
1921	678	170	848

Deaf-Mutism.

199. The local distribution of deaf-mutism in the Punjab is shown in Local diagram 57. It is shown in Section II of this chapter that Musalmans suffer from tribulation.

DIAGRAM 57.

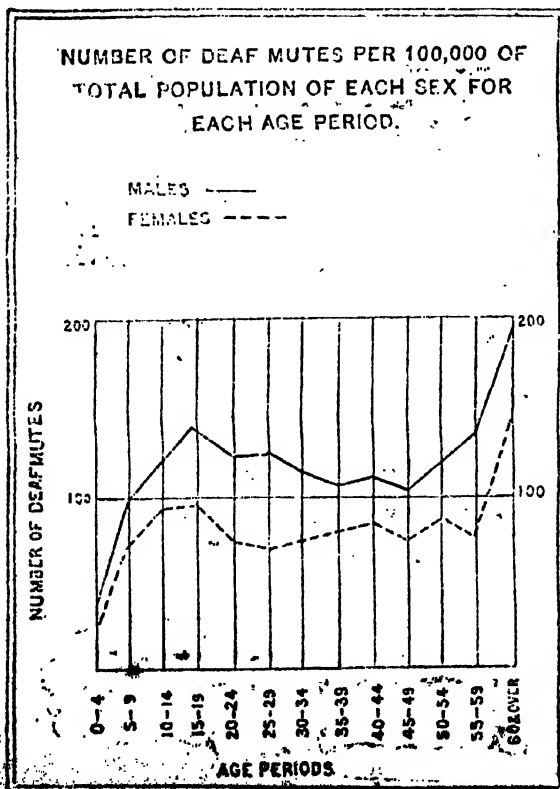


deaf-mutism in a significantly greater degree than Hindus, and this would explain the appearance of a relatively large amount of deaf-mutism in the Western Punjab. The greatest amount of deaf-mutism is, however, shown by the hill States and hill districts of Chamba, Kangra, Simla, Mandi and Nahan where the number of deaf-mutes exceeds 150 per 100,000 of the population. The Central Punjab, as in the case of insanity, appears to be relatively free from this infirmity.

No.	Natural Divisions.	Males.	Females.
1	Himalayan	329	210
2	Sub-Himalayan	114	81
3	North-West Dry Area	107	68
4	Indo-Gangetic Plain	69	41
5	Punjab	106	72

Deaf-mutism has a very wide range varying from 24 persons per 100,000 in Malerkotla to 372 persons per 100,000 in the Kangra district. The proportion of deaf-mutism per 100,000 persons by natural divisions is shown in the margin.

DIAGRAM 58



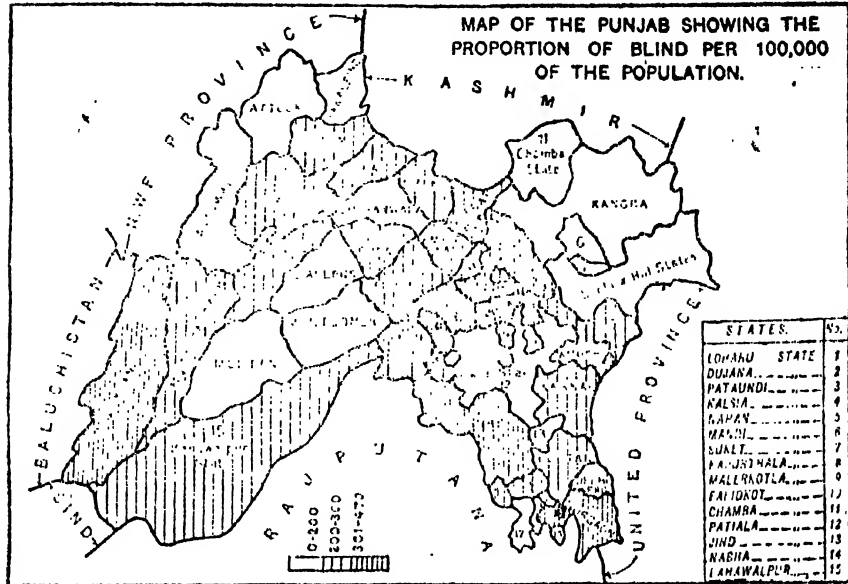
201. Diagram 58Age-distribution. shows the age-distribution for quinquennial periods for males and females separately, the figures being based on those of Subsidiary Table III,

Blindness.

Local distribution.

201. Diagram 59 gives the local distribution of blindness according to

DIAGRAM 59.

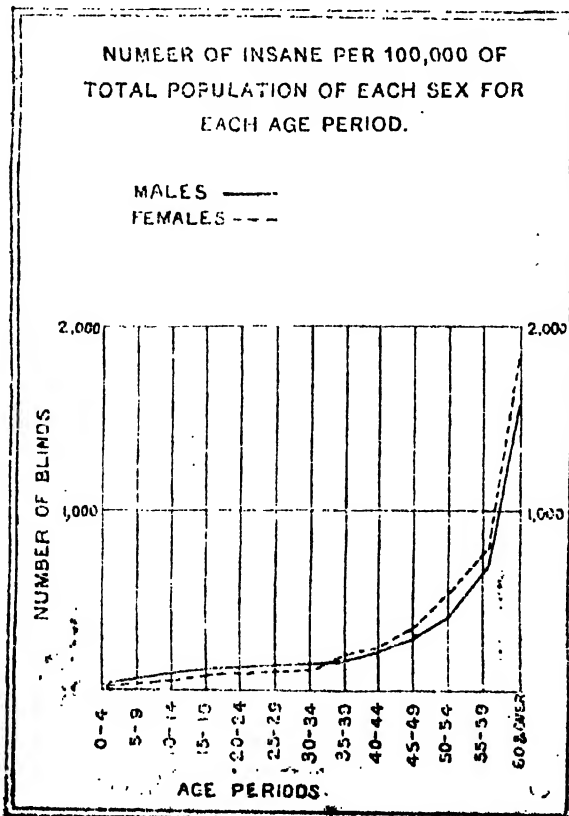


three grades of frequency, per 100,000 of the population, namely, from 0-200, 201-300, 301 and over. The districts and States with the highest proportion of blindness are comprised in a strip starting from the Hoshiarpur district on the North-East and broadening out to Ferozepore and Hissar on the Rajputana border. Besides this strip the districts of Gurgaon and Dera Ghazi Khan have both over 300 blind persons per 100,000 of population. The actual highest figure for blindness is shown by Patandi (470 per 100,000) and it is followed by Gurgaon (419), Dujana (414), Kalsia (406), Jullundur (392), Ludhiana (381), Hissar (367), Hoshiarpur (342), Faridkot (323), Patiala (322), Dera Ghazi Khan (322) and Ferozepore (319).

Age-distribution.

202. Variation in the proportion of blind from one age-group to another

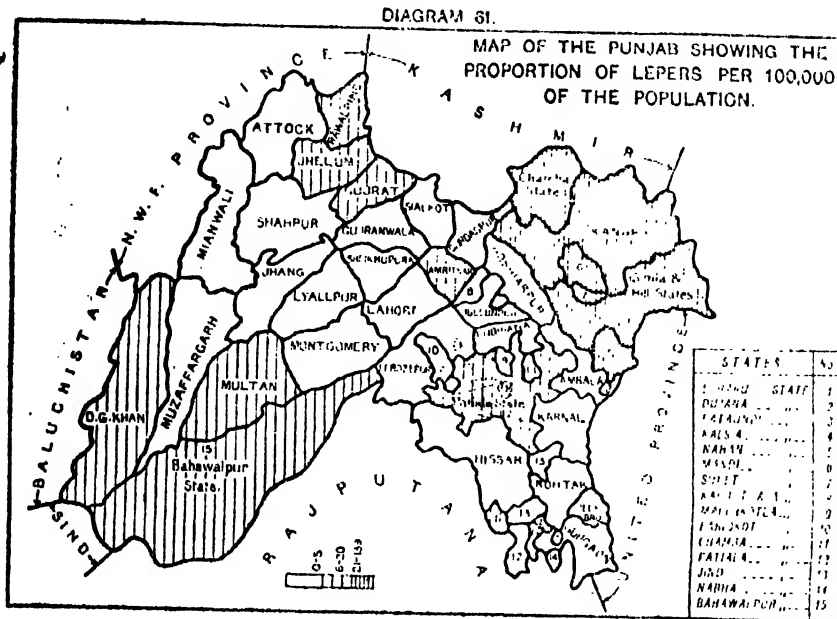
DIAGRAM 60



is shown for each sex by quinquennial periods in diagram No. 60 reproduced in the margin. Blindness being essentially a disease of old age, the curves for both males and females rise steadily for the higher age-groups. Only 55 persons, 35 males and 20 females, are recorded as blind for ages below 1 year, and this is evidence of the rarity of congenital blindness.

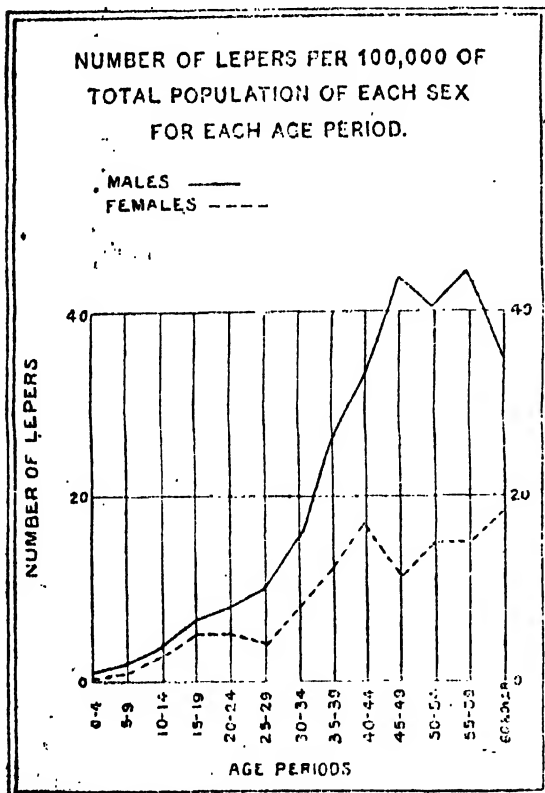
Leprosy.

203. The local distribution of leprosy according to 3 grades of frequency is shown in diagram 61 printed below, and as in the case of both insanity Local distribution.



and deaf-mutism the mountainous region of the Himalayas has a relatively large proportion of infirm persons.

204. Diagram 62, printed in the margin, shows the distribution of leprosy Age-distribution. by age in quinquennial age-periods for males and females separately.



portions of the Punjab can be attributed to the concourse of blind beggars attracted by the benevolence of the inhabitants cannot be positively affirmed, but the possibility should be borne in mind. If this is so the diagram of the distribution of blindness in the Punjab may be indicative of the areas in which reside the pious and the charitable.

Section II.—Consanguinity.

Comparative
extent of
infirmity
among
Hindus and
Musalmans.

205. It has been already remarked in paragraph 139 of Chapter VII that the Hindu and Musalman communities which differ in no practice of evolutionary import so much as in their observance of out-breeding and in-breeding, offer exceptional opportunities for studying the good and evil results of cousin marriage. The data obtained from the special enquiry into over a thousand marriages among Musalmans in the Punjab show that first-cousin marriages form about 40 per cent. of all Musalman marriages in Attock, 36 per cent. in Muzaffargarh, 23 per cent. in Gurdaspur and in Delhi. Possibly for pure Musalman castes, that is excluding those tribes which are recent converts to Islam, a percentage of about 25 of first-cousin marriages would be found throughout the Punjab.*

If there is any genetic effect of cousin marriage we should expect it to be reflected, it may be ever so dimly, in the relative amount of infirmities among Hindus and Musalmans. Unfortunately infirmities have not been classified by religion, and we can make only an approximate reconstruction from Table XII-A which gives the infirmities by castes, by grouping together the infirm of those castes which consist wholly or almost wholly of Hindus, or Sikhs, or Musalmans. 11 distinctively Hindu castes, 2 Sikh, and 17 distinctively Musalman castes were selected, and the population of each, and the numbers of infirm persons are shown in Subsidiary Table IV. The castes chosen and the percentage of the persons

I. DISTINCTIVELY HINDU CASTES.			III. DISTINCTIVELY MUSALMAN CASTES.		
Caste.	Percentage of Hindus in caste.		Caste.	Percentage of Musalmans in caste.	
Ahir	98.5		Arain	100.0	
Arya	100.0		Awam	100.0	
Bania	90.7		Biloch	100.0	
Brahman	99.1		Julaha	90.1	
Chuhra	92.4		Kashmiri	100.0	
Dagi and Koli	99.4		Maclhi	100.0	
Ghorath	99.3		Meo	100.0	
Kaulet	97.2		Mirasi	95.8	
Khattri	86.2		Mochi	98.4	
Mahajan	95.1		Moghad	100.0	
Rathi	100.0		Mussalli	100.0	
II. DISTINCTIVELY SIKH CASTES.			Pathan	100.0	
Caste.	Percentage of Sikhs in caste.		Qassab	100.0	
Khalra	95.3		Qureshi	100.0	
Rangarhia	87.2		Sayad	100.0	
			Sheikh	100.0	
			Teh	99.4	

belonging to the particular religion are shown in the margin. The list of castes may be legitimately criticised on the ground that among Musalmans a few castes such as the Meo and Sheikh include converts from Hinduism: and, further, on the ground that by not comparing the figures for

infirmity for each district separately we are introducing an error owing to the probable association of infirmity with locality. The latter criticism seems of some weight as the distinctively Musalman castes mostly inhabit the North-West of the Punjab, whilst Hindus are mostly to be found in the South and East, and the difficulty has been only partially met by dealing separately with each Natural Division of the Punjab. With these limitations in mind the proportion of each infirmity among Hindus and Musalmans will be compared.

It is idle to compare the crude figures of infirmity without taking into account the errors due to the smallness of the samples. For instance, in the Himalayan area there are only 147 insane Hindu males and 78 Hindu females as against 16 insane Musalman males and 14 Musalman females, so that by pure chance, say the chance of death, there might have been temporarily fewer Musalman insane than the average, and this would entirely vitiate a direct comparison unless due regard were paid to the errors of random sampling.† If we are comparing the

*There are two sources of error which militate against exact conclusions. Firstly, the 4 districts in which the enquiry was made can hardly be safely treated as representative of the 30 districts in the two Provinces. Secondly, with 1,000 cases there is still an appreciable error due to random sampling even if the 4 districts were representative. If we assume that the true percentage of first cousin-marriage is 25, the second cause gives rise to a standard error of $\sqrt{1000 \times \frac{1}{4} \times \frac{3}{4}} = 13.7$ or 1.4 per cent. So far then as random sampling affects the result the percentage of first-cousin marriage among Musalmans can hardly be less than 21 or greater than 29.

†The error of random sampling is nothing more than an exact measure of the well appreciated fact that small numbers do not afford as good material for generalisation as large ones. If you heard Jones make 2 false statements out of 2, you would not be so sure he was a habitual liar, as if you heard him make 100 false statements out of 100. In reality all differences of the figures from caste to caste, from religion to religion; of the data of one locality with those of another, and of the figures of one census with those of another should be compared with the "error of random sampling." While the comparison is always desirable, it becomes imperative when dealing with the small numbers involved in the Tables relating to infirmities.

extent of leprosy among Hindus and Musalmans in the Indo-Gangetic Plain, the crude figures are—

				NUMBER OF LEPERS PER MILLION AMONG	
				<i>Hindus.</i>	<i>Musalmans.</i>
Males	..	..	..	83	47
Females	..	..	..	15	24

and our first impulse is to conclude that among males, Hindus are more subject to the disease than Musalmans, while among females the reverse is the case. Actually we find on calculation of the standard error of the difference that the conclusion that Hindu males are more often leprosy than Musalman males is probably true for the Indo-Gangetic Plain; but for females there is no significant excess of the disease among Musalmans.

Subsidiary Table V gives in full the figures for the proportions of the infirm among the Hindu and Musalman communities, the difference in the proportions, and the ratio of that difference to its standard error. Wherever that ratio is not at least 3 or over, no significance should be attached to a differential proportion of infirm persons among the two communities. As, apart from the error of random sampling, a difference of the proportionate number of infirm persons may arise from inaccuracies of the record, it will be wise to defer judgment as to the reality of some of the differences which satisfy even the statistical criterion.

Out of 32 cases for the 4 Natural Divisions and 4 infirmities, for males and females, there is a statistically significant difference in 14 cases, and these are noted below:—

Infirmity.	Locality.	Sex.	Worse sufferers.
Insanity ..	Indo-Gangetic Plain.	Males.	Musalmans.
Deaf-mutism ..	Indo-Gangetic Plain.	Females.	Musalmans.
	Himalayan Area.	Females.	Musalmans.
	Sub-Himalayan Area.	Males.	Hindus.
	North-West Dry Area.	Males.	Musalmans.
Blindness ..	Indo-Gangetic Plain.	Males and Females.	Hindus.
	Himalayan Area.	Males.	Hindus.
	Sub-Himalayan Area.	Males and Females.	Hindus.
	North-West Dry Area.	Males.	Hindus.
Leprosy ..	Indo-Gangetic Plain.	Males.	Hindus.
	Himalayan Area.	Males and Females.	Hindus.

We may provisionally conclude that in the Punjab Hindus suffer more from blindness and leprosy than do Musalmans, but that Musalmans are, on the whole, more liable to deaf-mutism than Hindus. Hindus and Musalmans seem equally liable to insanity, no deduction unfavourable to the latter community being justified from the single instance (out of 8 possible instances) of an excess of Musalman insane among males in the Indo-Gangetic Plain.

So far then as this analysis goes there is nothing to show that consanguineous marriages are productive of an insane, blind, or leprosy diathesis, the Hindu community containing as many as, if not more persons infirm from these causes than the Musalman community.

The question of deaf-mutism is discussed in paragraph 207 below.

In relation to the excess of blind Hindus over the number of blind Musalmans it is necessary to recall that blindness is essentially a disease of old age, and that the Hindu community is slightly more long-lived, judging from the crude figures, than the Musalman. The mean age of Hindus at the present census was 25·7 years (males) and 24·1 (females), as against 25·0 (males) and 24·3 (females) for Musalmans; so this may account for a part of the result observed which is unfavourable to Hindus.

206. Deaf-mutism is dealt with separately in its relation to consanguinity because it has been found that its occurrence among the off-spring of related parents is not very different from expectation assuming that deaf-mutism arises from a single pair of recessive Mendelian elements, (*vide* Proc. Roy. Soc. B., Vol. 84, 1911).* For the analysis that follows the proportion of first-cousin marriage

*See also Eugenic's Laboratory Publications, Memoir Series IV, "On the measure of the resemblance of first-cousins" by Ethel M. Elderton and Karl Pearson, and Lecture Series IV "On the marriage of first-cousins" by Ethel M. Elderton.

of 25 per cent. has been adopted for all four Natural Divisions of the Punjab, this being the average suggested by the special enquiry described in paragraph 140 of Chapter VII (Civil Condition). This assumption leads by the methods of the paper cited to an estimate of the relative rates of production of deaf-mutism from first-cousin marriages and non-consanguineous marriages respectively among Musalmans; and, as we know the proportion of deaf-mutes among the non-inbreeding Hindu community our results can be tested by comparing it with the amount of deaf-mutism among the off-spring of unrelated Musalman parents.

The results obtained are conveniently exhibited in the following notation:—

Let D_M be the *observed* proportion of deaf-mutes among the Musalman population generally.

Let d_m be the *calculated* proportion of deaf-mutes who are the offspring of non-consanguineous marriages among Musalmans.

Let d'_m be the *calculated* proportion of deaf-mutes who are the offspring of cousin marriages among Musalmans.

Let D_H be the *observed* proportion of deaf-mutes among the Hindu population generally, a population which does not practice consanguineous marriage.

The calculation has been made for each Natural Division and for each sex separately. All results are expressed as so many cases in a million of population.

	INDO-GANGETIC PLAIN.		HIMALAYAN AREA.		SUB-HIMALAYAN AREA.		NORTH-WEST DRY AREA.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
D_M	771	514	3,608	3,307	964	818	1,137	700
d'_m	1,964	1,417	6,631	6,194	2,338	2,053	2,663	1,813
d_m	377	214	2,600	2,346	506	406	628	320
D_H	710	401	3,060	2,236	1,285	973	756	719
Ratio $d'_m : d_m$	5.2	6.6	2.6	2.6	4.6	5.1	4.2	5.5

This shows that if deaf-mutism can be regarded as a Mendelian unit character its appearance among the non-inbreeding section of the Musalman community is nearly always less than among Hindus, who never marry their relatives. The only apparent exception is for females in the Himalayan Area, when the difference is far too small to be significant. It is highly desirable to make the whole calculations afresh for such diverse values of the percentage of cousin marriage among Musalmans as would be found from a full enquiry in each of the 4 Natural Divisions. The adoption of an all round figure of 25 per cent. of first-cousin marriage for all Natural Divisions is necessitated by the paucity of the material. The results suggest either—

- (1) that Musalmans, apart from the practice of consanguineous marriage, are less liable to deaf-mutism than Hindus, or
- (2) that deaf-mutism cannot be associated with only a single pair of allelomorphic Mendelian elements.

Albinism.

207. The condition of Albinism, though it did not form part of the Census enquiry, has been so frequently attributed to consanguinity, of parentage, that it seemed worth while to attempt to discover if it occurs more frequently among Musalmans than Hindus. A report was asked for from all Deputy Commissioners as to the Albinos in their districts, and they were supplied with photographs of two typical Indian Albinos.* Unfortunately the replies showed that many cases of "phulberi" or leucoderma had been included, and all these cases, numbering over 500, have had to be discarded with the exception of 13 cases reported by Col. Forster, Director of Public Health, and two cases reported by my Personal Assistant, one of which I saw myself. The results are tabulated in Subsidiary Table VII. 15 cases (one of which from the description of symptoms of itching and spreading of the white patches given by Dr. Rasul, the District Medical Officer of Health, Rohtak, may be leucoderma) are too few to base sure conclusions on. Of the 15 cases 10 are Musalmans, 5 the children of first-cousin parents, and 5 the children of non-related parents, 5 cases are of Hindus, who are of course not the children of related marriages.

*Those were kindly supplied to me by Col. W. H. O. Forster, I. M. S., Director, Public Health, Punjab.

I. Number afflicted per 100,000 of the population at each of the last five censuses. II. Age distribution per 10,000 infirm persons of each sex. III. Number afflicted per 100,000 persons of each age-period and number of females afflicted per 100 males. IV. Showing the population and numbers of infirm for distinctively Hindu, Sikh and Musalman Castes; Population of certain selected castes by natural divisions. V. Showing the proportion of infirmity among Hindus and Musalmans, the difference of these proportions, and the ratios of this difference to its standard error. VI. Showing number of persons by sex suffering from single and dual infirmities. VII. List of certain Albinos in the Punjab 1923.

SUBSIDIARY TABLE I.

Number afflicted per 100,000 of the population at each of the last five censuses.

DISTRICT OR STATE AND NATURAL DIVISION.	INSANE.										DEAF-MUTES.									
	Males.					Females.					Males.					Females.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PUNJAB AND DELHI ..	35	31	43	36	58	20	20	26	21	36	105	95	91	115	145	71	70	66	77	95
PUNJAB ..	35	31	33	31	43	17	17	17	15	26	106	95	91	115	145	71	70	66	77	95
INDO-GANGETIC PLAIN WEST (TOTAL).	35	31	33	31	43	17	17	17	15	26	106	95	91	115	145	71	70	66	77	95
INDO-GANGETIC PLAIN WEST (PUNJAB).	35	31	33	31	43	17	17	17	15	26	106	95	91	115	145	71	70	66	77	95
1. Hissar ..	27	22	28	34	41	14	15	17	20	33	77	66	71	86	99	47	50	49	55	59
2. Loharu State ..	18	20	..	..	40	10	23	..	..	18	183	130	135	82	80	95	116	85	11	32
3. Rohtak ..	23	26	31	34	45	10	6	13	11	25	57	45	30	67	105	30	25	22	41	68
4. Dujana State ..	7	37	40	36	40	8	8	17	16	28	88	157	61	94	112	49	58	26	..	110
5. Gurgaon ..	19	19	16	18	5	10	10	8	6	3	61	65	71	59	79	40	58	11	40	53
6. Patudi State ..	..	10	35	10	21	12	..	..	..	..	52	79	87	70	147	23	21	38	44	60
7. Karnal ..	25	26	25	26	47	13	16	17	16	24	43	29	26	66	54	29	15	17	36	28
8. Jullundur ..	36	31	41	33	50	22	24	23	11	32	81	59	46	84	98	57	38	24	60	77
9. Kapurthala State ..	27	28	25	35	47	26	19	16	18	35	61	83	94	102	69	43	68	50	66	75
10. Ludhiana ..	24	25	29	32	50	19	14	21	15	30	83	58	42	80	135	37	25	31	15	75
11. Mulerkolla State ..	34	32	32	44	31	12	20	28	26	18	32	49	60	49	70	12	23	12	31	49
12. Ferozepore ..	31	27	29	34	31	18	19	17	22	20	83	59	41	73	68	16	38	23	16	41
13. Faridkot State ..	14	14	11	16	35	6	11	9	6	25	59	43	48	56	82	32	21	19	25	30
14. Patiala State ..	25	19	11	19	17	12	11	5	9	29	78	52	39	50	159	48	34	23	27	89
15. Jind State ..	17	19	10	26	18	5	6	2	13	29	54	54	39	67	132	35	36	23	14	66
16. Nabha State ..	19	12	17	15	33	8	9	9	7	37	50	67	79	77	112	24	34	58	42	66
17. Lahore ..	129	102	100	57	47	15	16	18	29	26	77	73	42	102	97	19	15	30	70	70
18. Amritsar ..	19	21	34	20	41	12	13	15	12	19	53	47	37	76	119	50	36	26	37	76
19. Gujranwala ..	17	20	35	36	55	13	17	19	15	29	69	71	59	86	91	43	45	35	47	59
20. Sheikhupura ..	29	..	..	..	..	17	..	..	..	..	96	..	..	..	..	41	..	..	..	..
HIMALAYAN ..	31	21	59	44	74	18	16	38	27	43	329	285	326	379	393	240	226	279	286	266
21. Nahan State ..	30	29	61	92	115	61	38	42	66	108	311	216	260	374	408	221	211	239	218	265
22. Simla ..	13	16	4	25	38	20	14	28	18	16	131	109	154	185	268	135	137	169	163	215
23. Simla Hill States ..	33	10	26	27	32	17	7	8	17	15	281	239	229	306	311	92	178	234	253	198
24. Bilaspur State ..	10	..	..	..	..	2	..	..	..	..	151	181	229	306	311	92	178	234	253	198
25. Kangra ..	29	26	96	16	81	13	18	61	30	17	437	437	461	477	481	303	311	356	344	350
26. Mandi State ..	34	9	4	34	48	17	3	10	19	14	184	51	48	177	147	122	37	31	43	97
27. Suket State ..	24	7	41	18	41	8	4	4	16	4	112	107	176	137	226	51	62	233	41	198
28. Chamba State ..	51	31	42	61	119	25	26	24	17	83	319	258	384	469	518	276	242	375	450	442
SUB-HIMALAYAN ..	27	24	42	34	51	15	17	26	22	33	114	115	86	121	158	81	83	63	83	104
29. Ambala ..	25	36	62	19	57	13	24	37	30	38	108	125	69	132	161	86	86	39	79	100
30. Kalsia State ..	31	48	89	49	11	36	93	73	74	55	267	281	273	268	271	254	256	215	200	201
31. Hoshiarpur ..	33	24	12	26	44	12	8	25	11	26	128	115	109	132	171	91	86	82	103	124
32. Gurdaspur ..	25	19	30	21	38	14	17	19	9	26	108	114	62	114	219	74	72	50	62	136
33. Sialkot ..	17	14	27	19	29	12	11	16	10	15	92	73	46	70	121	46	55	31	43	78
34. Gujrat ..	30	20	40	41	62	18	12	29	29	39	107	96	77	121	162	70	65	15	70	90
35. Jhelum ..	34	31	57	43	67	17	15	32	39	44	140	117	88	113	123	98	99	72	112	103
36. Rawalpindi ..	26	22	42	14	67	16	23	29	32	50	122	144	150	142	139	96	125	110	122	103
37. Attock ..	40	34	..	..	..	21	30	..	..	..	107	131	..	..	..	71	96	..	..	..
NORTH-WEST DRY AREA ..	44	41	60	53	114	30	30	40	34	71	107	94	126	116	141	68	66	85	71	84
38. Montgomery ..	33	53	73	59	102	24	31	40	37	55	91	103	158	115	147	57	76	91	67	64
39. Shahpur ..	34	26	71	36	98	26	24	13	20	73	98	102	151	150	205	72	79	107	94	133
40. Mianwali ..	44	37	39	..	..	15	17	11	..	..	131	91	142	..	..	79	69	109	..	..
41. Lyallpur ..	28	25	27	..	..	18	19	16	..	..	71	56	67	..	..	12	36	44	..	..
42. Jhang ..	63	51	76	55	155	35	36	44	29	85	156	106	155	148	157	98	74	94	78	106
43. Multan ..	43	47	84	53	119	31	39	58	28	67	102	117	156	106	139	61	84	102	76	77
44. Bahawalpur State ..	49	33	37	52	90	43	23	29	37	55	110	65	102	64	126	69	48	62	43	63
45. Muzaffargarh ..	56	61	79	81	118	48	52	49	54	97	138	119	118	167	110	85	75	73	96	89
46. Dera Ghazi Khan ..	62	51	80	40	127	32	29	47	35	79	115	103	133	91	106	70	64	103	56	64
DELHI ..	18	..	..	..	..	12	..	..	..	..	32	..	..	..	..	32	..	..	..	..
INDO-GANGETIC PLAIN WEST ..	18	..	..	..	..	12	..	..	..	..	32	..	..	..	..	32	..	..	..	..
1. Delhi ..	18	..	..	..	..	12	..	..	..	..	32	..	..	..	..	32	..	..	..	..

SUBSIDIARY TABLE I.

Number afflicted per 100,000 of the population at each of the last five censuses—concluded.

DISTRICT OR STATE AND NATURAL DIVISION.	BLIND.										LEPROS.									
	Males.					Females.					Males.					Females.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
PUNJAB AND DELHI	257	249	298	343	506	257	231	314	361	556	14	17	26	37	65	6	8	11	13	22
PUNJAB	259	..	..	..	..	259	..	..	..	..	15	..	..	..	..	6	..	..	..	..
INDO-GANGETIC PLAIN WEST (TOTAL).	296	238	340	396	579	299	306	349	409	628	7	10	15	22	43	2	4	5	6	18
INDO-GANGETIC PLAIN WEST (PUNJAB).	303	..	..	..	..	305	..	..	..	..	7	..	..	..	..	2	..	..	..	..
1. Hissar	370	358	325	452	538	361	439	358	538	653	6	11	16	27	59	2	2	2	6	7
2. Loharu State	210	130	181	100	315	321	197	156	131	354	37	..	12	27	11	..	..	..	..	..
3. Rohtak	247	255	266	308	524	236	269	257	326	664	..	4	10	18	41	1	1	1	5	13
4. Dogra State	413	418	304	211	359	382	298	274	213	456	30	15	64	36	24	..	..	..	..	..
5. Gurgaon	390	375	335	363	456	452	512	416	486	633	7	11	20	43	58	1	3	3	8	11
6. Patnauli State	460	335	400	271	410	480	458	461	322	336	10	..	..	..	..	..	..	..	..	..
7. Karnal	304	299	315	436	666	292	263	351	464	811	6	12	13	23	50	1	6	2	4	8
8. Jullundur	377	376	431	529	563	411	401	493	582	618	2	6	26	34	42	1	1	6	10	17
9. Kapurthala State	302	248	278	435	522	289	276	222	375	491	5	22	16	46	40	1	8	1	10	8
10. Ludhiana	395	285	609	641	707	361	318	667	653	781	4	17	15	27	42	1	13	7	10	9
11. Mukerikla	266	296	601	419	615	210	232	717	337	622	..	..	2	47	16	..	..	14	9	9
12. Ferozepore	312	317	396	493	575	362	311	387	501	551	7	6	9	23	41	1	2	4	6	12
13. Faridkot State	336	275	371	483	618	307	205	307	406	505	2	3	11	17	3	..	5	4	9	9
14. Patiala State	328	266	198	275	710	315	239	135	218	740	12	14	23	18	59	4	5	6	4	16
15. Jind State	228	218	145	361	468	217	168	138	320	416	5	3	5	15	23	1	..	2	1	4
16. Nabha State	275	289	445	378	581	210	218	349	304	633	5	4	10	15	64	..	1	7	3	15
17. Lahore	239	263	336	399	561	262	297	354	425	585	5	4	8	7	14	1	1	2	2	3
18. Amritsar	276	267	401	358	530	285	309	432	339	455	18	28	26	20	57	8	17	14	10	28
19. Gujranwala	185	236	299	360	579	190	235	319	371	572	7	3	6	7	16	3	1	3	4	7
20. Sheikhupura	221	..	..	..	..	264	..	..	..	..	3	..	..	..	..	..	..	..	..	..
HIMALAYAN	173	123	130	152	223	166	144	154	161	243	110	117	163	209	289	47	50	70	83	102
21. Nahan State	230	171	220	302	387	252	272	266	361	375	205	234	306	308	605	58	72	103	93	202
22. Simla	98	36	76	103	217	161	116	113	181	262	22	26	298	317	357	229	144	233	242	163
23. Simla Hill State	136	98	86	156	155	131	108	105	154	127	127	99	161	204	228	50	4	62	84	75
24. Bilaspur State	67	..	..	..	..	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25. Kangra	198	168	156	132	222	180	177	182	131	258	75	104	135	155	209	280	40	55	58	75
26. Manik State	190	32	67	116	177	187	51	41	115	148	149	53	85	222	221	78	21	53	72	91
27. Saket State	135	117	135	61	123	66	54	171	41	155	105	121	135	65	256	35	11	51	16	62
28. Chamba State	158	96	111	195	371	158	98	171	272	520	121	171	250	440	621	77	121	146	224	276
SUB-HIMALAYAN	241	227	295	316	439	240	229	318	338	491	11	14	25	37	70	6	7	10	13	22
29. Ambala	29	281	366	462	512	296	315	421	535	624	17	19	25	52	75	9	6	4	10	18
30. Kalua State	33	236	304	449	493	501	391	368	543	267	12	16	22	29	79	4	..	3	10	29
31. Hoshiarpur	331	275	382	396	493	346	281	480	448	584	7	16	32	51	92	1	3	10	13	23
32. Gurdaspur	27	279	331	259	501	269	278	318	272	511	7	9	14	21	54	2	2	5	8	16
33. Sialkot	211	224	295	282	482	264	215	272	256	478	6	13	11	21	57	4	4	5	8	17
34. Gujrat	222	171	296	288	466	232	170	319	317	568	8	13	27	36	91	8	7	16	14	32
35. Jhelum	238	221	236	217	329	219	216	305	319	373	17	18	30	28	53	14	12	12	18	22
36. Rawalpindi	121	134	128	173	220	106	119	122	186	261	27	26	32	46	68	16	23	18	25	29
37. Attock	101	166	..	..	..	162	189	..	..	..	7	4	..	..	..	2	3	..	..	..
NORTH-WEST DRY AREA	214	228	253	304	536	219	247	279	347	615	6	3	9	8	19	3	3	7	4	10
38. Montgomery	201	290	355	345	586	190	310	348	321	597	5	4	16	9	8	2	1	7	3	3
39. Shahpur	202	213	378	405	607	232	232	439	486	761	3	3	5	16	28	1	3	4	6	14
40. Mianwali	165	171	221	..	..	181	201	394	..	..	3	2	4	..	..	3	2	6	..	..
41. Lyallpur	205	173	130	..	..	188	182	124	..	..	4	2	4	..	..	..	1	3	..	..
42. Jhang	221	221	265	283	584	194	203	233	301	721	4	1	6	6	17	3	2	8	4	8
43. Multan	175	237	268	221	488	179	266	167	234	521	10	4	16	7	14	6	3	7	2	9
44. Bahawalpur State	239	182	202	263	441	225	162	211	324	421	9	5	15	6	17	5	7	11	2	7
45. Muzaffargarh	251	289	247	39	545	292	344	390	480	709	7	1	7	16	27	3	4	4	7	16
46. Dera Ghazi Khan	278	307	299	278	559	337	369	358	335	704	8	4	16	8	24	3	1	11	6	16
DELHI	135	..	..	..	..	136	..	..	..	..	3	..	..	..	..	1	..	..	..	..
INDO-GANGETIC PLAIN WEST	135	..	..	..	..	136	..	..	..	..	3	..	..	..	..	1	..	..	..	..
1. Delhi	135	..	..	..	..	136	..	..	..	..	2	..	..	..	..	1	..	..	..	..

SUBSIDIARY TABLE II.

Age distribution per 10,000 infirm persons of each sex.
PUNJAB AND DELHI.

Age.	INSANE.												DEAF-MUTES.											
	Males.						Females.						Males.						Females.					
	1881	1901	1911	1921	1931	1941	1901	1911	1921	1931	1941	1951	1881	1901	1911	1921	1931	1941	1901	1911	1921	1931	1941	1951
0-4 (inclusive)	84	73	627	1031	1031	1031	266	294	323	326	326	326	490	391	430	469	490	490	490	490	490	490	490	490
5-9 (inclusive)	679	627	1031	1031	1031	1031	924	1219	1403	1403	1403	1403	1286	1363	1433	1475	1475	1475	1475	1475	1475	1475	1475	1475
10-14 (inclusive)	1,005	1,031	1,267	1,171	1,181	1,181	963	1,219	1,403	1,403	1,403	1,403	1,286	1,363	1,433	1,475	1,475	1,475	1,475	1,475	1,475	1,475	1,475	1,475
15-19 (inclusive)	1,027	1,138	1,190	1,553	1,370	1,370	958	1,092	1,318	1,318	1,318	1,318	1,149	1,309	1,389	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465
20-24 (inclusive)	1,089	1,236	1,467	1,200	1,200	1,200	957	1,092	1,318	1,318	1,318	1,318	1,149	1,309	1,389	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465
25-29 (inclusive)	1,207	1,282	1,439	1,222	1,222	1,222	957	1,092	1,318	1,318	1,318	1,318	1,149	1,309	1,389	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465
30-34 (inclusive)	1,201	1,258	1,449	1,222	1,222	1,222	957	1,092	1,318	1,318	1,318	1,318	1,149	1,309	1,389	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465
35-39 (inclusive)	748	747	780	805	805	805	683	747	780	780	780	780	683	747	780	805	805	805	805	805	805	805	805	805
40-44 (inclusive)	553	511	380	485	485	485	304	358	358	358	358	358	304	358	358	358	358	358	358	358	358	358	358	358
45-49 (inclusive)	558	511	380	485	485	485	304	358	358	358	358	358	304	358	358	358	358	358	358	358	358	358	358	358
50-54 (inclusive)	580	469	480	216	216	216	304	358	358	358	358	358	304	358	358	358	358	358	358	358	358	358	358	358
55-59 (inclusive)	254	192	164	344	344	344	197	262	262	262	262	262	197	262	262	262	262	262	262	262	262	262	262	262
60 and over	695	696	675	335	335	335	608	1,076	1,076	1,076	1,076	1,076	608	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076	1,076

NOTE.—Figures of 1931 include North-West Frontier Province.

SUBSIDIARY TABLE II.

Age distribution per 10,000 infirm persons of each sex.—concluded.

Age.	PUNJAB.												DELHI.			
	Insane.				Deaf-mute.				Blind.				Deaf-mute.		Blind.	
	Males.		Females.		Males.		Females.		Males.		Females.		Males.		Females.	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
0—4 (inclusive)	..	95	152	283	392	187	50	95	..	400	113	298	132	72	..	..
5—9 (inclusive)	..	982	672	1,224	1,367	399	223	258	385	404	450	896	264	107	..	..
10—14 (inclusive)	..	1,009	953	1,319	1,374	433	307	448	577	1,200	1,011	747	396	250	..	..
15—19 (inclusive)	..	1,030	964	1,091	1,008	421	270	597	769	400	1,348	747	343	214	..	..
20—24 (inclusive)	..	1,098	869	864	811	366	339	570	1,154	800	1,011	896	343	143	..	..
25—29 (inclusive)	..	1,209	938	922	771	415	353	543	1,154	400	899	597	475	179	..	..
30—34 (inclusive)	..	1,200	964	813	786	432	400	1,126	577	2,000	335	298	844	500	1,250	..
35—39 (inclusive)	..	741	743	541	567	394	411	990	1,346	800	1,124	298	369	357	..	3,333
40—44 (inclusive)	..	841	969	573	697	502	602	1,401	1,923	1,600	1,286	1,343	818	500	1,250	3,333
45—49 (inclusive)	..	549	628	358	356	477	493	624	1,346	400	223	298	528	357	1,250	..
50—54 (inclusive)	..	582	774	508	546	862	1,050	1,045	385	800	674	896	1,346	1,714	2,500	3,334
55—59 (inclusive)	..	257	266	256	176	559	563	407	..	..	113	298	554	857	1,250	..
60 and over	..	696	1,079	1,246	1,149	4,553	4,770	1,696	384	800	1,461	2,388	3,688	4,760	2,500	..

SUBSIDIARY TABLE III.

Number afflicted per 100,000 persons of each age period and number of females afflicted per 1,000 males.

Age.				NUMBER AFFLICTED PER 100,000 OF TOTAL POPULATION OF EACH SEX FOR EACH AGE PERIOD.								NUMBER OF FEMALES AFFLICTED PER 1,000 MALES.			
				Insane.		Deaf-mutes.		Blind.		Lepers.		Insane.	Deaf-mute.	Blind.	Lepers.
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
1				2	3	4	5	6	7	8	9	10	11	12	13
PUNJAB.															
ALL AGES	..	..	..	35	20	106	72	259	259	15	6	469	557	826	368
0—4 (inclusive)	..	..	..	3	2	24	19	38	26	1	..	761	767	653	700
5—9 (inclusive)	..	..	..	10	9	89	64	71	50	2	1	462	622	609	422
10—14 (inclusive)	..	..	..	29	17	115	89	92	72	4	3	434	580	587	471
15—19 (inclusive)	..	..	..	43	24	136	92	128	89	7	5	439	515	530	579
20—24 (inclusive)	..	..	..	50	22	120	73	123	110	8	5	381	523	765	500
25—29 (inclusive)	..	..	..	52	23	119	68	131	112	10	4	364	466	703	348
30—34 (inclusive)	..	..	..	56	25	115	73	149	134	16	9	374	539	765	506
35—39 (inclusive)	..	..	..	47	29	105	80	186	208	27	13	469	584	863	363
40—44 (inclusive)	..	..	..	52	32	108	84	230	260	31	17	539	670	989	442
45—49 (inclusive)	..	..	..	51	35	100	72	324	362	41	11	536	553	854	197
50—54 (inclusive)	..	..	..	41	34	117	86	182	596	41	15	623	509	1,006	244
55—59 (inclusive)	..	..	..	44	30	133	73	709	841	45	15	484	382	833	236
60 and over	..	..	..	35	35	192	133	1,706	1,991	36	18	724	514	866	361
DELHI.															
ALL AGES	..	..	..	18	12	32	32	135	136	3	1	481	753	739	375
0—4 (inclusive)	..	..	..	..	3	3	7	17	7	..	..	1,000	2,000	400	..
5—9 (inclusive)	..	..	..	6	4	13	21	32	11	..	..	500	1,500	300	..
10—14 (inclusive)	..	..	..	11	15	32	25	53	35	..	..	1,000	556	467	..
15—19 (inclusive)	..	..	..	15	5	44	26	17	31	..	..	250	417	162	..
20—24 (inclusive)	..	..	..	19	9	28	27	41	18	..	..	333	667	308	..
25—29 (inclusive)	..	..	..	20	5	27	21	61	26	..	..	167	500	278	..
30—34 (inclusive)	..	..	..	11	29	11	12	121	81	4	..	1,667	667	137	..
35—39 (inclusive)	..	..	..	41	19	59	19	82	96	..	10	286	200	714	1,000
40—44 (inclusive)	..	..	..	52	32	58	71	162	11	5	8	400	818	452	1,000
45—49 (inclusive)	..	..	..	67	15	19	31	193	154	10	..	143	1,000	500	..
50—54 (inclusive)	..	..	..	15	21	44	62	375	499	15	10	1,000	1,000	941	500
55—59 (inclusive)	..	..	..	..	..	23	60	475	79	23	..	..	2,000	1,143	..
60 and over	..	..	..	16	22	105	175	1,100	1,454	16	..	1,000	1,231	978	..

SUBSIDIARY TABLE IV.

Showing the population and numbers of infirm for distinctively Hindu, Sikh and Musalman castes.

POPULATION OF CERTAIN SELECTED CASTES BY NATURAL DIVISIONS.

No.	CASTES.	INDO-GANGETIC PLAIN WEST.		HIMALAYAN.		SUB-HIMALAYAN.		N.-W. DRY AREA.		PUNJAB (TOTAL.)	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Ahir	100,370	87,355	328	92	2,061	1,090	1,388	848	113,147	89,385
2	Arya	3,483	2,424	231	233	20,595	18,081	3,366	2,471	27,675	23,209
3	Bania	182,512	153,299	1,700	1,942	18,236	14,340	1,877	1,163	204,326	169,844
4	Brahman	291,589	227,083	116,371	106,170	113,150	95,484	27,868	19,484	548,978	448,521
5	Chuhra	326,921	275,464	2,836	1,753	38,675	31,093	10,671	32,274	409,103	340,584
6	Dagi and Koli	5,135	4,623	78,011	74,737	776	651	13	18	85,135	80,029
7	Ghirath	636	131	61,585	57,728	8,985	7,995	33	23	71,239	65,877
8	Kanet	146	151	146,422	137,381	2,187	1,872	..	..	148,755	139,404
9	Khatri	113,850	89,560	8,521	6,290	83,094	72,596	15,143	36,850	250,698	205,296
10	Mahajan	5,301	4,890	2,129	2,014	11,059	10,418	37	16	18,520	17,477
11	Rathi .. ..	..	..	59,795	58,220	8	8	15	35	59,818	58,263
	Total	1,039,243	844,989	478,829	445,960	298,826	253,758	120,411	93,182	1,937,309	1,637,889
1	Khalsa	3,910	2,565	51	36	1,187	1,244	99	53	5,541	3,898
2	Ramgarhia	25,878	23,043	397	93	14,731	13,638	125	28	41,131	36,802
	Total	29,788	25,608	448	129	16,218	14,882	218	81	46,672	40,700
1	Arain	313,290	257,655	1,168	959	112,934	91,048	169,774	143,781	597,166	493,443
2	Awan	11,375	11,013	19	7	159,472	147,614	57,040	50,590	230,906	209,224
3	Biloch	10,750	9,554	6	1	2,333	2,251	276,848	229,638	289,937	241,444
4	Julaha	121,992	100,747	26,134	23,282	101,260	87,244	101,316	84,900	350,702	296,173
5	Kashmiri	33,990	26,788	1,972	1,242	51,066	47,871	3,965	2,787	90,993	78,688
6	Machhi	68,751	58,438	104	41	16,199	14,983	65,700	54,756	151,054	128,218
7	Meo	61,637	51,884	..	..	204	123	255	242	62,096	52,249
8	Mirasi	51,704	44,427	3,565	2,488	24,589	23,754	40,361	40,133	126,219	110,802
9	Mochi	79,359	66,129	233	205	69,212	61,702	85,864	71,958	234,668	199,994
10	Moghal	12,908	10,650	632	355	29,045	27,223	4,580	3,558	47,165	41,786
11	Mussalli	16,775	14,182	18	16	38,202	33,858	138,833	110,214	193,828	167,270
12	Pathan	10,927	30,362	3,586	1,553	43,329	38,376	60,417	49,525	147,359	119,816
13	Qassab	29,585	26,752	330	176	7,584	7,152	27,162	23,491	44,061	57,571
14	Qureshi	10,502	8,202	146	84	18,187	17,260	23,135	20,109	51,970	45,655
15	Sayad	39,959	33,713	612	441	45,736	43,330	46,351	39,437	132,658	116,921
16	Sheikh	89,374	70,069	4,855	2,757	34,858	26,851	15,827	12,380	144,914	112,067
17	Teli	109,979	91,008	4,293	3,592	43,520	37,099	13,178	10,035	170,970	141,734
	Total	1,104,957	911,573	47,873	37,199	798,030	707,739	1,184,806	956,534	3,087,266	2,613,045

SUBSIDIARY TABLE IV.

Showing the population and numbers of infirm for distinctively Hindu, Sikh, and Musalman castes. -continued.

No.	Caste.	INDO-GANGETIC PLAIN WEST.		HIMALAYAN.		SUB-HIMALAYAN.		N.W. DRY AREA.		TOTAL PUNJAB.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	1	2	3	4	5	6	7	8	9	10	11
INSANE.											
1	Ahir	16	6	..	..	2	..	..	..	18	6
2	Arya .. ..	..	..	..	..	3	5	..	..	3	5
3	Bania	58	19	1	..	5	5	1	3	65	27
4	Brahman ..	131	39	33	11	50	19	11	6	225	78
5	Chuhra ..	61	38	..	..	15	3	3	6	79	47
6	Dagi and Koli	1	2	22	17	..	..	..	..	23	19
7	Ghirath ..	..	..	30	5	2	1	..	..	32	6
8	Kanet .. ..	..	..	39	37	..	..	..	..	39	37
9	Khatri	70	75	3	..	32	9	22	8	127	92
10	Mahajan ..	..	..	1	..	1	2	..	..	5	2
11	Rathi	1	..	15	5	1	..	5	..	22	5
Total ..		338	179	147	78	111	44	42	23	638	324
1	Khalsa	1	2	..	..	2	..	1	1	7	3
2	Ramgarhia ..	6	2	..	..	5	..	..	..	11	2
Total ..		7	4	..	..	7	..	4	1	18	5
1	Arain	105	50	..	..	37	13	79	45	221	108
2	Awan	2	2	..	..	39	23	20	7	81	31
3	Biloch	8	..	..	..	2	1	148	71	158	75
4	Julaha	57	14	9	8	50	18	57	26	173	66
5	Kashmiri ..	5	17	3	3	11	8	..	..	19	28
6	Machhi	18	9	..	..	1	..	29	16	18	25
7	Meo	12	3	..	..	..	..	..	..	12	3
8	Mirasi	11	5	1	..	5	4	22	21	39	30
9	Mochi	33	8	..	..	17	13	58	23	108	41
10	Moghal	6	1	..	..	3	1	..	1	9	3
11	Mussalli ..	3	9	..	..	1	3	32	37	36	49
12	Pathan	58	6	..	..	22	11	18	8	108	28
13	Qassab	7	8	..	..	..	2	11	10	21	26
14	Qureshi ..	7	2	..	..	5	1	12	3	24	6
15	Sayad	85	8	..	..	12	2	28	19	125	29
16	Sheikh	36	14	2	2	14	1	..	..	52	20
17	Teli	22	17	1	1	11	7	5	1	39	26
Total ..		475	173	16	14	260	116	522	291	1,273	594
DEAF-MUTES.											
1	Ahir	83	26	..	..	5	1	..	4	88	31
2	Arya	1	..	..	..	26	27	..	3	27	30
3	Bania	158	75	2	..	22	16	6	..	188	91
4	Brahman ..	197	81	329	164	153	111	19	10	698	366
5	Chuhra ..	207	105	5	1	57	32	19	15	288	153
6	Dagi and Koli	19	11	319	292	..	..	..	..	368	303
7	Ghirath ..	1	..	268	177	15	9	..	..	284	186
8	Kanet .. ..	..	..	392	270	15	7	..	..	407	277
9	Khatri	72	13	16	9	83	43	17	31	218	126
10	Mahajan ..	..	..	1	1	7	1	..	..	8	2
11	Rathi .. ..	..	..	103	83	1	..	..	1	104	87
Total ..		738	341	1,465	997	384	247	91	67	2,678	1,652
1	Khalsa	8	2	..	..	13	1	9	3	30	6
2	Ramgarhia ..	12	1	..	..	8	1	2	..	22	2
Total ..		20	3	..	..	21	2	11	3	52	8
1	Arain	200	119	2	6	103	65	161	101	556	324
2	Awan	11	7	..	..	154	100	16	31	211	138
3	Biloch	8	3	..	..	..	6	338	168	346	177
4	Julaha	92	33	119	78	136	93	138	73	485	277
5	Kashmiri ..	25	6	7	6	25	37	..	..	57	49
6	Machhi	68	33	..	..	5	2	92	40	105	75
7	Meo	18	23	..	..	..	..	..	..	18	23
8	Mirasi	35	34	2	1	32	28	60	21	129	90
9	Mochi	50	25	5	..	48	54	117	58	220	137
10	Moghal	6	7	1	2	38	9	1	..	46	18
11	Mussalli ..	16	13	..	..	42	32	129	79	187	115
12	Pathan	23	12	5	..	52	42	49	27	129	81
13	Qassab	23	17	..	..	2	3	42	18	67	38
14	Qureshi ..	6	1	..	..	19	12	32	17	57	30
15	Sayad	35	23	..	..	41	28	61	26	137	77
16	Sheikh	80	40	3	7	21	20	10	7	114	74
17	Teli	69	43	28	20	51	48	16	7	164	118
Total ..		855	469	172	123	769	579	1,292	670	3,068	1,841

SUBSIDIARY TABLE IV—concluded.

Showing the population and numbers of infirm for distinctively Hindu, Sikh and Musalman castes.—concluded

No.	Caste.	INDO-GANGETIC PLAIN WEST.		HIMALAYAN.		SUB-HIMALAYAN.		N. W. DRY AREA.		TOTAL PUNJAB.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	1	2	3	4	5	6	7	8	9	10	11
BLIND.											
1	Ahir	307	289	..	..	2	2	14	6	323	297
2	Arya	4	4	..	..	114	98	2	..	120	102
3	Bania	551	450	3	..	23	19	13	..	590	469
4	Brahman ..	910	799	205	183	388	264	75	45	1,578	1,291
5	Chuhra ..	1,630	1,483	3	3	198	191	144	108	1,975	1,785
6	Dagi and Koli	39	35	160	169	..	4	..	..	199	198
7	Ghirath ..	..	..	125	98	16	15	..	..	141	113
8	Kanet .. ..	..	1	327	343	7	8	..	..	334	352
9	Khattri ..	250	142	11	1	126	125	105	82	492	350
10	Mahajan ..	1	..	2	1	13	6	..	..	16	7
11	Rathi .. ..	..	..	96	60	5	9	..	10	101	79
Total		3,692	3,203	932	848	892	741	353	251	5,869	5,043
1	Khalsa	27	25	..	..	6	14	32	12	65	51
2	Rangarhia ..	67	49	..	..	38	27	2	..	107	76
Total		94	74	..	..	44	41	34	12	172	127
1	Arain	707	560	2	..	217	199	286	273	1,242	1,032
2	Awan	42	26	..	..	312	203	77	90	431	319
3	Biloch	34	20	..	..	2	12	661	658	697	690
4	Julaha	412	379	39	47	303	225	263	235	1,017	886
5	Kashmiri ..	49	45	3	1	32	35	7	5	91	86
6	Machhi	183	213	..	..	12	6	176	204	371	423
7	Meo	175	171	..	..	..	..	..	..	175	171
8	Mirasi	197	176	1	..	77	67	114	132	389	375
9	Mochi	204	201	..	..	122	143	221	186	547	530
10	Moghal	23	18	..	1	37	38	5	8	65	65
11	Mussalli ..	44	62	..	..	60	69	357	296	461	427
12	Pathan	91	74	4	..	105	174	119	86	319	334
13	Qassab	88	81	..	1	4	11	69	73	161	166
14	Qureshi ..	17	7	..	..	28	20	42	41	87	68
15	Sayad	85	104	..	..	77	54	93	65	255	223
16	Sheikh	204	154	2	3	52	35	19	28	277	220
17	Teli	294	248	6	2	88	94	20	19	408	363
Total		2,849	2,539	57	55	1,558	1,385	2,529	2,399	6,993	6,378
LEPERS.											
1	Ahir	11	..	..	..	..	..	..	..	11	..
2	Arya .. ..	..	..	..	..	4	3	..	..	4	3
3	Bania	12	2	1	..	1	..	1	..	15	2
4	Brahman ..	29	5	72	32	18	9	..	1	119	47
5	Chuhra ..	7	1	3	..	2	3	1	..	13	4
6	Dagi and Koli	16	3	151	72	..	..	..	..	167	75
7	Ghirath ..	3	1	56	12	..	..	..	..	59	13
8	Kanet .. ..	..	..	324	120	..	..	..	..	324	120
9	Khattri ..	8	1	2	3	14	10	2	..	26	14
10	Mahajan ..	..	..	..	1	..	..	..	..	..	1
11	Rathi .. ..	..	..	77	30	..	..	..	..	77	30
Total		86	13	686	270	39	25	4	1	815	309
1	Khalsa	1	..	..	..	3	..	..	..	4	..
2	Rangarhia ..	..	1	..	..	1	..	..	..	1	1
Total		1	1	..	..	4	..	..	..	5	1
1	Arain	4	3	..	..	6	1	8	4	13	8
2	Awan	1	..	..	..	19	7	4	2	24	9
3	Biloch .. ..	..	..	..	..	..	..	18	8	18	8
4	Julaha	7	5	9	4	8	5	5	1	29	15
5	Kashmiri ..	1	..	1	1	4	2	1	..	7	3
6	Machhi	8	3	..	..	1	..	7	2	16	5
7	Meo	3	2	..	..	..	..	..	..	3	2
8	Mirasi	4	2	8	..	8	1	2	..	22	3
9	Mochi	1	..	1	..	3	3	9	2	14	5
10	Moghal	1	..	..	..	3	..	..	..	4	..
11	Mussalli ..	1	..	..	..	1	3	4	2	6	5
12	Pathan	4	1	1	..	6	5	2	2	13	8
13	Qassab	1	..	..	..	..	..	5	1	6	1
14	Qureshi ..	..	..	..	..	1	1	..	..	1	1
15	Sayad	5	1	..	..	1	5	4	..	10	6
16	Sheikh	6	3	1	..	2	6	..	..	9	9
17	Teli	5	2	1	..	3	1	2	..	11	3
Total		52	22	22	5	66	40	71	24	211	91

SUBSIDIARY TABLE V.

Showing the proportion of infirmity among Hindus and Musalmans, the difference of these proportions, and the ratio of this difference to its standard error.

Natural Division	INFIRMITY.		PROPORTION OF INFIRMITY.		Difference of the proportions Δ .	Standard error of difference Δ	Ratio of col. 4 to col. 5, Δ/Δ
			Hindus.	Musalmans.			
INDO-GANGETIC PLAIN WEST.	1 MALES.		2	3	4	5	6
	Insanity	.. ..	3.25 $\times 10^{-4}$	4.30 $\times 10^{-4}$	1.05 $\times 10^{-4}$	2.66 $\times 10^{-5}$	3.95
	Deaf-mutism	.. ..	7.10 $\times 10^{-4}$	7.74 $\times 10^{-4}$	6.4 $\times 10^{-5}$	3.73 $\times 10^{-5}$	1.72
	Blindness	.. ..	3.55 $\times 10^{-3}$	2.58 $\times 10^{-3}$	9.7 $\times 10^{-4}$	7.55 $\times 10^{-5}$	12.85
	Leprosy	.. ..	8.3 $\times 10^{-5}$	4.7 $\times 10^{-5}$	3.6 $\times 10^{-5}$	1.1 $\times 10^{-5}$	3.3
	FEMALES.						
	Insanity	.. ..	2.12 $\times 10^{-4}$	1.90 $\times 10^{-4}$	2.2 $\times 10^{-5}$	2.14 $\times 10^{-5}$	1.03
	Deaf-mutism	.. ..	4.04 $\times 10^{-4}$	5.14 $\times 10^{-4}$	1.1 $\times 10^{-4}$	3.24 $\times 10^{-5}$	3.4
	Blindness	.. ..	3.79 $\times 10^{-3}$	2.79 $\times 10^{-3}$	1.0 $\times 10^{-3}$	8.63 $\times 10^{-5}$	11.6
	Leprosy	.. ..	1.5 $\times 10^{-5}$	2.4 $\times 10^{-5}$	0.9 $\times 10^{-5}$	0.67 $\times 10^{-5}$	1.31
HIMALAYAN.	MALES.						
	Insanity	.. ..	3.07 $\times 10^{-4}$	3.36 $\times 10^{-4}$	2.9 $\times 10^{-5}$	8.451 $\times 10^{-5}$	0.34
	Deaf-mutism	.. ..	3.06 $\times 10^{-3}$	3.61 $\times 10^{-3}$	5.5 $\times 10^{-4}$	2.68 $\times 10^{-4}$	2.1
	Blindness	.. ..	1.95 $\times 10^{-3}$	1.20 $\times 10^{-3}$	7.5 $\times 10^{-4}$	2.08 $\times 10^{-4}$	3.1
	Leprosy	.. ..	14.33 $\times 10^{-4}$	4.61 $\times 10^{-4}$	9.72 $\times 10^{-4}$	1.761 $\times 10^{-4}$	5.5
	FEMALES.						
	Insanity	.. ..	1.75 $\times 10^{-4}$	3.76 $\times 10^{-4}$	2.01 $\times 10^{-4}$	0.745 $\times 10^{-4}$	2.7
	Deaf-mutism	.. ..	2.24 $\times 10^{-3}$	3.31 $\times 10^{-3}$	1.07 $\times 10^{-3}$	2.6 $\times 10^{-4}$	4.1
	Blindness	.. ..	1.90 $\times 10^{-3}$	1.48 $\times 10^{-3}$	4.2 $\times 10^{-4}$	2.33 $\times 10^{-4}$	1.8
	Leprosy	.. ..	6.05 $\times 10^{-4}$	1.34 $\times 10^{-4}$	4.71 $\times 10^{-4}$	1.29 $\times 10^{-4}$	3.7
SUB-HIMALAYAN.	MALES.						
	Insanity	.. ..	3.72 $\times 10^{-4}$	3.20 $\times 10^{-4}$	4.6 $\times 10^{-5}$	3.94 $\times 10^{-5}$	1.2
	Deaf-mutism	.. ..	1.29 $\times 10^{-3}$	0.96 $\times 10^{-3}$	3.3 $\times 10^{-4}$	0.695 $\times 10^{-4}$	4.7
	Blindness	.. ..	2.99 $\times 10^{-3}$	1.95 $\times 10^{-3}$	1.04 $\times 10^{-3}$	0.101 $\times 10^{-3}$	10.3
	Leprosy	.. ..	1.31 $\times 10^{-4}$	0.83 $\times 10^{-4}$	4.8 $\times 10^{-5}$	2.1 $\times 10^{-5}$	2.3
	FEMALES.						
	Insanity	.. ..	1.73 $\times 10^{-4}$	1.64 $\times 10^{-4}$	0.9 $\times 10^{-5}$	2.985 $\times 10^{-5}$	0.3
	Deaf-mutism	.. ..	9.73 $\times 10^{-4}$	8.18 $\times 10^{-4}$	1.55 $\times 10^{-4}$	6.678 $\times 10^{-5}$	2.3
	Blindness	.. ..	2.92 $\times 10^{-3}$	1.96 $\times 10^{-3}$	9.6 $\times 10^{-4}$	1.09 $\times 10^{-4}$	8.8
	Leprosy	.. ..	9.9 $\times 10^{-5}$	5.7 $\times 10^{-5}$	4.2 $\times 10^{-5}$	1.90 $\times 10^{-5}$	2.2
N.-W. DRY AREA.	MALES.						
	Insanity	.. ..	3.49 $\times 10^{-4}$	4.59 $\times 10^{-4}$	1.1 $\times 10^{-4}$	0.61 $\times 10^{-4}$	1.7
	Deaf-mutism	.. ..	0.76 $\times 10^{-3}$	1.14 $\times 10^{-3}$	3.8 $\times 10^{-4}$	1.605 $\times 10^{-4}$	3.8
	Blindness	.. ..	2.93 $\times 10^{-3}$	2.23 $\times 10^{-3}$	7.0 $\times 10^{-4}$	1.45 $\times 10^{-4}$	4.8
	Leprosy	.. ..	3.3 $\times 10^{-5}$	6.2 $\times 10^{-5}$	2.9 $\times 10^{-5}$	2.31 $\times 10^{-5}$	1.2
	FEMALES.						
	Insanity	.. ..	2.47 $\times 10^{-4}$	3.04 $\times 10^{-4}$	5.7 $\times 10^{-5}$	5.04 $\times 10^{-5}$	0.96
	Deaf-mutism	.. ..	7.19 $\times 10^{-4}$	7.00 $\times 10^{-4}$	1.9 $\times 10^{-4}$	9.09 $\times 10^{-5}$	0.21
	Blindness	.. ..	2.69 $\times 10^{-3}$	2.51 $\times 10^{-3}$	1.8 $\times 10^{-4}$	1.72 $\times 10^{-4}$	1.05
	Leprosy	.. ..	1.1 $\times 10^{-5}$	2.5 $\times 10^{-5}$	1.4 $\times 10^{-5}$	1.87 $\times 10^{-5}$	0.84

SUBSIDIARY TABLE VI.																
Showing number of persons by sex suffering from single and dual infirmities.																
1. PUNJAB.																
	PERSONS.					MALES.					FEMALES.					
	Insane.	Deaf-mutes.	Blind.	Lepers.	Total.	Insane.	Deaf-mutes.	Blind.	Lepers.	Total.	Insane.	Deaf-mutes.	Blind.	Lepers.	Total.	
Insane ..	6,994	274	115	20	7,403	4,776	174	66	10	5,026	2,218	100	40	10	2,377	
Deaf-mutes ..	274	22,361	346	46	22,927	174	14,351	160	43	14,728	100	8,010	86	3	8,199	
Blind ..	115	246	64,852	26	65,239	66	160	35,485	16	35,727	49	86	29,367	10	29,512	
Lepers ..	20	46	26	2,699	2,791	10	43	16	1,979	2,048	10	3	10	720	743	
Total ..	7,403	22,927	65,239	2,791	98,360	5,026	14,728	35,727	2,048	57,529	2,377	8,199	29,512	743	40,831	

Not.—Figures in bold type are for single infirmities.

SUBSIDIARY TABLE VII.							
List of certain Albinos in the Punjab 1923.							
Name.	Father's Name.	District.	Caste.	Age.	Relationship of Albinos parents.	Other Albinos in family.	Reporter.
1	2	3	4	5	6	7	8
Mohammed Ramzan.*	Ghulam Rasul	Amritsar	Kashmiri (Sheikh.)	44	None	2 brothers (a), 1 sister (A)	D. P. H.
Mohammed Jamil*	Abdullah	Do.	Kashmiri	18	Do.	1 brother (a), mother (A)	„
Mat. Jan Bibi	Bhola	Sialkot	Mushaki	25	Do.	1 brother (A), 2 sisters (a) 1 grand father (A).	„
Mohsau Ali	Bagal Shah	Do.	Sayad	50	1st cousins	2 brothers (A), 1 sister (A) father (A).	„
Talab Hussain	Abdullah Shah	Do.	Do.	23	Do.	3 brothers (a), 2 sisters (a)	„
Salig Ram*	Kishen Das	Rohtak	Khatra	48	None	No brothers or sisters	Leucoderma.
Chandu Lal*	Mussadi Lal	Do.	Mahajan	69	Do.	3 brothers (a), 2 sisters (a)	„
Mohammad Shafi*	Ramrak Ali	Do.	Sheikh	35	Do.	5 brothers (a)	„
Gama	Roshan	Ludhiana	Fugir	13	1st cousins	2 brothers (a + A), 1 sister (A).	„
Hashmat Ullah	Nasrullah	Do.	Pathan	28	Do.	1 brother (A), 1 sister (A)	„
Sundar Singh	Tara Singh	Amballa	Jat Sikh	15	None	No brothers or sisters	„
Baggo	Wazira	Ludhiana	Rajput	40	Do.	3 brothers (A + 2 a)	„
Parshotam Das	Dwarka Das	Multan	Babra	33	Do.	3 sisters (a)	„
Mohammad Hussain	Mehdi Hassan	Delhi	Sayad	17	Do.	None	P. A. (seen by me).
Amanullah Khan	Nasrullah Khan	Mecrut	Pathan	27	1st cousins	1 brother (A), 1 sister (A)	„

Note.—In column 7 entries should be interpreted thus :—3 brothers (A + 2a) means that the Albino has 3 brothers one of whom is an Albino and the other 2 are not Albinos.

CHAPTER XI.

Caste, Tribe, Race or Nationality.

208. Reference to statistics. 209. Census Instructions. 210. Claims for alterations in classification. 211. Classification of castes and modern disintegrating tendencies. 212. Chief Hindu, Musalman and Sikh Castes. 213. Classification of castes according to their traditional occupations. 214. Variations since 1911. 215. Europeans and Anglo-Indians.

208. The statistics relating to caste, tribe, race and nationality are to be found in six of the Imperial Tables. The chief of these is Table XIII, which shows by sex and religion, the number in each caste for each district and State of the Punjab and Delhi. The other tables are

Reference to statistics.

Table IX which gives the education by selected castes, tribes or races for 4 main divisions of the Punjab separately, namely, the Eastern Punjab, Central Punjab Hills, Central Punjab Plains, and Western Punjab. The table distinguishes Hindus, Musalmans, and Sikhs in each caste in which there are many representatives of each religion.

Table XII-A gives the infirmities by selected castes, but unlike Table IX does not distinguish the religious groups. The data for infirmities for selected religions was specially compiled for the purposes of the discussion of infirmities in paragraph 206 of Chapter X.

Table XIV gives the data, for certain selected castes and tribes, of civil condition for quinquennial age-groups, and distinguishes the religions and tribes in each caste.

Table XVI gives the age-grouping of Europeans and Allied Races and Anglo-Indians.

Table XXI gives the occupation of selected castes, tribes or races for the same local divisions as Imperial Table IX.

Proportional figures are given in the Subsidiary Tables as follows :

Subsidiary Table I gives the castes classified according to their traditional occupations, and

Subsidiary Table II gives the variation in the number of persons composing the caste, tribe or race since 1881.

209. The instructions to enumerators printed on the cover of the enumeration book read as follows :—

Census Instructions.

“Column 8 (caste).—Enter the caste or tribe of Hindus, Musalmans, Jains, Sikhs, Aryas, Brahmos and aboriginal tribes, and the race of Christians, Buddhists, Parsis, etc.”

The supplementary instructions to Supervisors printed as Appendix I to the Code of Census Procedure 1921 go into great detail, and only a few paragraphs of these instructions will be quoted here :

“The castes and tribes in this Province are well known. The names of exogamous groups, or words indicating locality, occupation or titles should not be entered. Thus, Bania is a functional term, including many different castes such as Aggarwal, Oswal, Mahesri, etc. Words like Bengali, Hindustani, Madrasi and Nepali must be rigorously tabooed. Musalmans are divided, not only into racial groups, such as Sheikh, Sayad, Moghal and Pathan, but also into functional groups such as Julaha, Penja, etc. Names of functional groups should not be noted as tribes except where they are recognised as separate tribes, e.g., Lohars, Tarkhans.

In respect of Faqirs and Sadhus, who have abandoned their caste, the order to which they belong should be noted in this column.....

When a person of low caste wishes to return himself as belonging to a high caste to which he obviously does not belong, e.g., a “Teli” wishes to return himself as a “Moghal” he should be shown as belonging to the caste or tribe to which he is generally supposed to belong. Again if a “Jat or Sunar” wishes to be entered as “Rajput” he should not be entered as a Rajput if the people do not call him a Rajput. Trag Jats of Isa Khel should, for instance, not be returned as Niazi Pathans even though they should very much wish this to be done....

The functional group of Sunars has frequently been treated as a caste, but this should be avoided as far as possible. Persons who have recently joined the profession and are not known as Sunars by caste should be recorded as belonging to their original caste.....

Members of the Arya Samaj, who say that they have abandoned caste or do not wish to have any caste recorded, may be entered as Arya by caste.

No Sikh should be pressed to name the caste to which he belongs if he does not wish to do so; in such cases the word "Sikh" may be entered in this column.

Women.—The caste or tribe of an unmarried girl will be the same as that of her father. In respect of a married woman the entry should be as stated by her husband. No enquiry should be made as to the caste or tribe of a woman before her marriage. Her present caste or tribe should be asked and the answer taken down without question. Among Hindus the caste of a woman will be that of her husband. But among Mohamadans the husband may, in some cases, like to have one of his wives put down as Pathani, the other as Jatti, and a third as a Bilochni.....

In order to eliminate incorrect classification an index of castes and tribes of the Punjab was prepared and circulated for the guidance of district census officers. This index contained the names of castes and tribes recognised as such, as well as the names of certain sub-castes and clans, so that when only the clan, or *goira* was recorded in the schedule, it could always be referred to its proper caste. List B contained 42 local and geographical names and functional terms, for example, Baghban, Beldar, Dogra, Maniar, Paharia, Purbia, Sepi and so forth, which are not true caste designations. List C gave a number of synonyms for the terms used in List A.

While every effort, therefore, was made to prevent wrong entries arising from ignorance, yet a certain amount of inaccuracy was inevitable owing to deliberate misstatement. The common source of error under this head arose from cases in which a group of persons claimed to belong to a higher caste than that in which they were habitually classified.

210. The chief claims for a re-classification of caste which occurred in the present census are noted in the margin.

The claims were dealt with in the following way:—

(1) A deputation of Kanets, Rathis, etc., who wished themselves to be styled Rajputs was received, and it was decided that there would be no objection to their being included amongst

Rajputs if the Ruling Rajput Chiefs of the places where the community has a majority did not object. Different opinions were received and accordingly with the permission of the Punjab Government the following head was adopted in Chapter XIII.

RAJPUT AND ALLIED CASTES.				
Rajput.	Kanet.	Rathi.	Thakur.	Rawat.

(2) Claims 2 and 3 were rejected.

(3) Claim No. 4 was admitted, but it was too late then to issue instructions to district officers, and the tables still record the number of Mahtons.

(4) After discussion with the representatives of the Brahman Roy Sabha it was decided that persons recording themselves as Brahm Batt or Brahman Roi will not be grouped with Bhats, Bhataras, etc., as in 1911.

The instructions to enumerators were—

"Persons who described themselves as Brahm Batt or Brahman Roi should be recorded as such, they should not be confused with Bhats or Bhataras."

These instructions had been issued when a protest was received from the Doaba Brahman Bhat on the ground that many Bhats who had no connection

Claims for
alterations in
classifications.

	Recognised Caste.	Caste claimed.
1	Kanot, Rathis, Rawats and Thakars.	Rajputs.
2	Nais (represented by Raja Brahman Maha Sabha, Lahore)	Raja Brahman.
3	Nais (represented by the Indraprastha Thakur Maha Sabha, Delhi).	Rajput or Thakur.
4	Mahtons	Rajputs.
5	Bhat	Brahman Bhat or Brahman Rai
6	Jangida	Brahmans.
7	Mehra	Mehra Rajput.
8	Tamboli	Kshatriyas.
9	Hindu Ramgarhias	Dhiman Brahmans.

with Brahman Bhats or Brahman Rois had taken advantage of the instructions to record themselves as such. During compilation it was found that only 3,566 persons in the Punjab and 21 in Delhi had recorded themselves as Brahman Bhat, and these were accordingly included among Bhat Hindus.

(5) The claim of the Mehra Rajputs was also admitted. The deputation asserted that persons belonging to this community were to be found in the districts of Karnal, Ambala, Rohtak and Hissar and in the Jind State, but on compilation it was found that only 2,226 persons returned themselves as Mehra Rajputs, and as these were not in the localities stated by the claimants all of them were included among Jhiwars in Table XIII.

The Kambohs represented by the "All India Kamboj Conference" wished themselves to be classed as Kambojs which, they said, was the correct name and the following instruction was, therefore, issued:—

"Kamboh and Kamboj are different forms of the name of the same caste, which ever term is used by the persons themselves should be recorded."

After compilation it was found that 146,687 persons recorded themselves as Kamboh and 52,038 as Kamboj. In Table XIII therefore, Kambohs have been shown as "Kamboh (Kamboj)". As indicative of the great store which certain communities set on caste may be instanced the fact that the Dhiman Brahmans sent a deputation long after the Imperial Tables had been printed. This deputation claimed that the persons shown in Imperial Table XIII as Hindu Ramgarhias, totalling 5,156 males and 4,494 females, comprised mainly in the districts of Hoshiarpur, Jullundur, Ludhiana and Gurdaspur, should be classed as Dhiman Brahmans. The deputation was informed that the head in Imperial Table XIII could not be altered at that late stage, and no useful purpose would be served by discussing the merits of the claim.

211. The classification adopted in 1891 was based on considerations of ethnology, history, and function, and was discarded in 1901 in favour of a new classification by social precedence. The enquiries that were made for this purpose, though they elicited a considerable amount of interesting information, roused here and there a certain amount of resentment.*

Classifications of castes and modern disintegrating tendencies.

In Imperial Table XIII of the present report the various castes are shown alphabetically, and where more than one religion is returned by the members of a caste, separate figures have been given for each. In this connection Mr. Middleton makes some very interesting observations, which I quote *in extenso*. He says:—

"My intention was to confine these chapters almost entirely to statistics. I was going to point out that the learned treatise on caste included in past census reports (which are in reality quite extraneous and unnecessary as part of the census) has led to a tradition that the census Officer is an arbiter on caste questions. I decline to take up that position. I would have given no decision in caste disputes, but would have mentioned the aspiration of such people as the Ahluwalias with all sympathy. I had intended pointing out that there is a very wide revolt against the classification of occupational castes; that these castes have been largely manufactured and almost entirely preserved as separate castes by the British Government. Our land records and official documents have added iron bands to the old rigidity of caste. Caste in itself was rigid amongst the higher castes, but malleable amongst the lower, we pigeon-holed everyone by castes and if we could not find a true caste for them labelled them with the name of an hereditary occupation. We deplore the caste system and its effect on social and economic problems, but we are largely responsible for the system which we deplore. Left to themselves such castes as Sunar, Tarkhan and Lohar would rapidly disappear and no one would suffer. The large number of people who have refused to record any caste at this census is a sign of progress and the breaking of customary bonds, it is no reflection on the administration of the census. Personally I am very strongly in favour of all caste statistics being abandoned at the next census, though in this I probably go further than most Europeans. Government's passion for labels and pigeon-holes has led to a crystallisation of the caste system, which, except amongst the aristocratic castes was really very fluid under indigenous rule.

There is no justice in labelling a Government official whose ancestors have worked in similar capacities as a Sunar, a Tarkhan or by any other term denoting

*Then the Ahluwalias protested against being associated with Kalala (the distillers of wine). The Kayasths resented being described as Adham Shudras of a mixed origin, in the Census Report of 1911.

a menial occupation with which his family has no connection whatever. Nor is there any good to be obtained from constant reiteration of the doubtful fact that Ahluwalias are of the distilling and wine-selling castes.

If the Government would ignore caste it would gradually be replaced by something very different amongst the lower castes. It is the inflexibility of the lower castes more than of the higher that paralyses the Indian's efforts at economic salvation, and that inflexibility is not inherent in the caste system itself."

While there is much in Mr. Middleton's argument, it is going too far to saddle Government with the responsibility for maintaining caste distinctions and the recognition of caste is a far too radical and inherent social phenomenon to be materially affected by the more or less academic classification adopted for the purpose of the Census reports. Here and there a printed record of a tradition or historical practice may retain a community in the bonds of an effete institution, but in the case of caste distinctions it is very doubtful whether these would be maintained simply on the strength of the Census statistical tables, were the progress of social evolution to require their abolition. It may indeed be argued, and has been argued that Government, so far from maintaining the caste system, has been one of the chief agencies in destroying it. By the introduction of Western Art, Sciences and ideas, many of the old village industries have become unprofitable, and people from all castes have flocked together in increasing numbers in mills, mines and workshops, with the result that the traditional caste has been abandoned together with the traditional occupation. The increase of trade and commerce and of railway transport, which has brought into contact all grades of the community, has tended towards the same end. Likewise Western Education has fostered the idea of equality, and education no longer remains the monopoly of the higher castes. On the whole, therefore, it appears to be nearer the truth that Government, so far from setting up and maintaining caste barriers, has, by its political, educational and economic activities, tended to produce a disintegration of the caste system.

HINDU, MUSALMAN AND SIKH CASTES FOR PUNJAB ONLY.

Chief Hindu,
Musalman
and Sikh Castes,

Serial Number	Castes.	Total strength 000's omitted.	Percentage to the total strength of the caste.	Serial No.	Castes.	Total strength 000's omitted.	Percentage to the total strength of the caste.
<i>Hindu Castes.</i>				<i>Musalman Castes.</i>			
1	Jat	1,055	19.3	12	Teli	311	99.4
2	Brahman	992	99.4	13	Machhi	279	100.0
3	Chamar	974	85.4	14	Pathan	267	100.0
4	Chuhra	603	92.4	15	Sheikh	257	100.0
5	Arora	695	83.1	16	Sayad	250	100.0
6	Rajput	521	27.7	17	Faqir	239	86.3
7	Khatri	393	86.2	18	Mirasi	227	95.8
8	Aggarwal	325	92.1	19	Lohar	219	67.8
9	Kanet	280	97.2	20	Nai	219	60.7
10	Jiwar	226	60.8	21	Kashmiri	170	100.0
11	Ahir	200	98.5	22	Dhobi	151	90.4
12	Kumhar	165	28.7	23	Qassab	122	100.0
13	Dagi and Koli	161	99.4	24	Meo	114	100.0
14	Tarkhan	163	26.5	25	Qureshi	98	100.0
15	Gujjar	159	25.3	26	Jhiwar	94	25.3
16	Ghirath	136	99.3	27	Maliar	89	100.0
17	Rathi	118	100.0	28	Moghal	89	100.0
18	Nai	108	29.9	29	Khoja	87	100.0
19	Mali	93	98.9	30	Kamboh	81	40.7
20	Dhanak	87	100.0	31	Dogar	74	100.0
21	Lohar	84	26.0	32	Mallah	70	54.6
22	Sunar	79	61.7	33	Khokhar	69	100.0
23	Saini	73	57.4	34	Blarai	61	98.4
24	Julaha	59	9.1	35	Barwala	59	89.4
25	Arya	51	100.0	<i>Sikh Castes.</i>			
<i>Musalman Castes.</i>				1	Jat	1,823	33.4
1	Jat	2,594	47.3	2	Chamar	163	14.3
2	Rajput	1,329	70.7	3	Tarkhan	140	22.7
3	Arain	1,089	99.8	4	Arora	118	16.5
4	Julaha	583	90.1	5	Kamboh (Kamboj)	84	42.2
5	Biloch	531	100.0	6	Ramgarhia	68	87.2
6	Gujjar	466	74.2	7	Unspecified	67	68.4
7	Awan	440	100.0	8	Mazhabi	64	98.5
8	Mochi	428	98.4	9	Khatri	63	13.8
9	Kumhar	386	67.2	10	Mahtam	63	67.0
10	Mussalli	361	100.0	11	Saini	54	42.2
11	Tarkhan	313	50.8	12	Jhiwar	52	13.9

212. The marginal statement shows the castes of the 3 great communities which contribute 50,000 or more to the population of the Punjab province. The actual total strength is shown as well as the percentage of the main religion in each caste. The pure castes, namely, those in which the members of only a single religious group are comprised are as follows:—

Hindus.

Rathis, Dhanak, Arya.

Musalman.

Biloch, Awan, Mussalli, Machhi, Pathan, Sheikh, Sayad, Kashmiri, Qassab, Meo, Qureshi, Maliar, Moghal, Khoja, Dogar, Khokhar.

Sikhs.

There are no pure castes.

The castes which include the fewest of other religions are the Mazhabi (98·5 per cent. of Sikhs), Ramgarhia (87·2 per cent. of Sikhs), and Mahtam (67·0 per cent. of Sikhs).

Castes which show great admixture of all three religious communities are the Jat (19·3 per cent. Hindus, 47·3 per cent. Musalmans, 33·4 per cent. Sikhs,) Rajput (27·7 per cent. Hindus, 70·7 per cent. Musalmans,) Kumhar (28·7 per cent. Hindus, 67·2 per cent. Musalmans), Gujjar (25·3 per cent. Hindus, 74·2 per cent. Musalmans) and Nai (29·9 per cent. Hindus, 60·7 per cent. Musalmans). As was to be expected, the functional castes, such as Kumhar, Tarkhan, Gujjar, Nai, Lohar and Julaha contain a great proportion of two or more of the main religious communities.

As regards the pure Hindu castes the Dhanak belongs especially to Hindostan and not to the Punjab proper, and is confined to the South-East of the Province. It is a low caste tribe and even the Chuhra is said to look down on it. The Rathis are said by Mr. Rose to be

(1) a tribe of Jata in Rohtak who are among the old inhabitants of the tract, and claim to be by origin Tanwa Rajput, or

(2) a caste of Rajputs found in the Kangra Hills and in Chamba.

According to Hutchison the Rathis:—

“as a hill tribe, are older than the Brahmos and Rajputs, who came from the plains at a latter period; and we may safely conclude that the oldest strata among them are descended, either directly or by the half-blood, from the early Aryan colonists of the hills. The first Aryan immigrants, as we now know, intermarried freely with the aboriginies, resulting in a fusion of the two races from which may have sprung the various low caste tribes now forming such an important part of the population. But the completeness of the fusion was not at all times uniform, and later waves of immigration may have remained more or less isolated, forming the nucleus of the community which now comprises the Thakurs and Rathis..... We may, therefore, regard the Thakurs and Rathis as being now a conglomerate people, representing the ultimate product of the welding together of many different contributions to their ranks.”

The term Arya refers to those Hindus who have adopted certain religious beliefs, and, therefore, naturally, does not include any Musalmans or Sikhs. Of other nearly pure Hindu tribes the Brahman (99·4 per cent.), Kanet (97·2 per cent.), Ahir (98·5 per cent.), Dagi and Koli (99·4 per cent.), Ghirath (99·3 per cent.) and Mali (98·9 per cent.) may be mentioned. Of the purely Hindu castes, the Rathi, the Kanet, the Dagi and Koli, and the Ghirath are residents of the hills, and were, therefore, more likely than Hindus in the plains to resist conversion to Islam. On the other hand, the absence of any pure Sikh castes is to be attributed to the fact that Sikhism was a religion adopted by Hindus, who would naturally retain their original caste.

213. As pointed out in paragraph 212 no attempt has been made at this Census to group castes according to their social standing, but in Subsidiary Table I an effort has been made to classify them as far as possible according to their traditional occupations. The subject will be dealt with in detail in Chapter XII, and it will suffice to refer here to the groups in each province according to occupa-

Classification of caste according to their traditional occupations.

tional classification. The list is given in the margin.

214. The variation in population of the various castes since 1881, is exhibited in Subsidiary Table II appended to this chapter, and these variations should be compared with a figure of 5·6 per cent. increase in the total population of the provinces, Punjab and Delhi. The more noticeable increases are found in the case of the Kamboh (+15·3 per cent.), Khokhar (+15·4 per

Variations since 1911.

PUNJAB.		DELHI.	
Traditional occupation	Proportion per mille of population.	Traditional occupation	Proportion per mille of population.
Cultivators	451	Cultivators	258
Weavers and Carders	79	Traders and Pedlars	247
Traders and Pedlars	77	Weavers and Carders	112
Leather workers	64	Priests and Devotees	107
Priests and Devotees	56	Leather workers	101
Scavengers	54	Astrologers	79
Astrologers	40	Cattle rearers	59
Carpenters	41	Scavengers	49
Cattle rearers	36	Confectioners	28
Fishermen and Boatmen	30	Fishermen and Boatmen	26

cent.), Mahtam (+15·3 per cent.), Mussalli (+16·6 per cent.), Qureshi (+40·2 per cent.), Rathi (+20·7 per cent.), Khoja (+38·1 per cent.), and Rajput (+16·6 per cent.); while marked decreases are shown by Chuhra (−17·4 per

cent.), Dumna (-49.0 per cent.), Ghirath (-19.9 per cent.), Kanet (-28.6 per cent.) and Sunar (-17.9 per cent.).

Whether these variations are significant, and if significant, to what causes they are to be referred, would require more examination than is possible at the present stage.

Europeans
and Anglo-
Indians.

215. Imperial Table XVI gives the data for sex and age of the European and Anglo-Indian population for each district and State in the Punjab. The distribution of Europeans and Allied Races in the various districts of the Punjab

Distribution of Europeans and Allied Races in Districts of the Punjab.

DISTRICTS CONTRIBUTING PERSONS.						
Under 20.	20 to 50.	50 to 100.	101 to 500.	501 to 1,000.	1,000 to 2,000.	over 2,000.
Hissar. Karnal. Jhang. Dera Ghazi Khan.	Rohtak, Luthiana. Sheikhupura Gujrat.	Gurgaon. Kangra. Gujranwala. Shahpur. Jhelum. Montgomery. Lyalpur.	Hoshiarpur. Amritsar. Gurdaspur. Attock. Mianwali. Muzaffargarh.	Jullundur	Ambala. Ferozepore. Sialkot. Multan.	Simla. Lahore. Rawalpindi.

Distribution of Anglo-Indians in the Districts of the Punjab.

Below 5.	6 to 20.	21 to 50.	51 to 100.	101 to 500.	501 to 1,000.	over 1,000.
Rohtak, Kangra, Hoshiarpur. Luthiana. Ferozepore. Attock. Muzaffargarh Dera Ghazi Khan. Lyalpur.	Karnal. Jullundur. Sheikhupura Jhelum. Montgomery Jhang.	Gurdaspur. Gujranwala. Gujrat. Shahpur. Mianwali.	Hissar. Gurgaon. Amritsar Sialkot.	Simla. Rawalpindi. Multan.		Ambala. Lahore.

ber of British subjects of European and Allied races, including Armenians was 21,546 comprising, 15,860 males and 5,686 females. Of the total, number of persons 21,154, or over 98 per cent., reside in British Territory. No definition of the term Anglo-Indian was adopted for the preparation of the Census Schedule. The total number of Anglo-Indians recorded in the Census is 4,499 (2,397 males and 2,102 females). The districts of Lahore, Ambala, Rawalpindi and Multan alone include more than 100 Anglo-Indians each. If the term Anglo-Indian is to include all those who have Indian and English blood in their veins from their recent ancestry then the census figures seem remarkably small, and there appears to be no immediate prospect of obtaining the correct number of persons who should be classed as Anglo-Indians in this sense. The total number of persons returned as of European and Anglo-Indian descent is 26,454 while the number of persons returning one or other European languages as their mother tongue was 27,075. The agreement is as close as could be expected.

is shown in the table in the margin. The districts containing the headquarters of Government and then the districts containing military cantonments naturally have the greatest number of Europeans. No other comment on the figures is required. The total num-

I. Castes classified according to their traditional occupations. II. Variation in caste, tribe, since 1881.

SUBSIDIARY TABLE I.

Castes classified according to their traditional occupations.

GROUP AND CASTE.	STRENGTH 000's OMITTED.		PROPORTION per mille OF THE POPULATION OF THE PROVINCE.		GROUP AND CASTE.	STRENGTH 000's OMITTED.		PROPORTION per mille OF THE POPULATION OF THE PROVINCE.	
	Punjab.	Delhi.	Punjab.	Delhi.		Punjab.	Delhi.	Punjab.	Delhi.
1	2	3	4	5	1	2	3	4	5
Agriculturists	15,835	232	631	474	Blacksmiths	328	2	13	5
(a) LANDHOLDERS	20	..	1	..	50. Lohar	323	2	13	5
(b) CULTIVATORS	11,395	126	454	258	51. Others	5	..	1	..
1. Jat	5,464	48	218	98	Masons	13	..	..	..
2. Rajput	1,880	27	75	55	Potters	575	9	23	19
3. Arain	1,091	3	43	5	52. Kumbhar	574	9	23	19
4. Biloch	531	..	21	..	53. Others	1	..	..	..
5. Awan	440	..	17	..	Glass and lac workers	2	..	..	..
6. Kanet	288	..	11	..	Gold and silversmiths	128	1	5	3
7. Pathan	267	17	11	35	54. Sunar	128	1	5	3
8. Kamboh	190	..	8	..	Brass and coppersmiths	4	..	..	..
9. Ghirath	137	..	5	..	Confectioners and grain purchasers	661	13	26	26
10. Meo	114	4	5	8	55. Jhiwar	372	11	15	2
11. Saini	128	2	5	4	56. Machhi	279	1	11	3
12. Mali	91	8	1	15	57. Others	10	1	..	1
13. Meghal	89	1	3	9	Oil pressers (Teli)	313	3	12	6
14. Rathi	118	..	7	..	58. Teli	313	3	12	6
15. Maliar	89	..	4	..	Distillers	16	..	1	..
16. Qureshi	98	2	1	1	Butchers	494	12	20	24
17. Khokhar	69	..	3	..	59. Qassab	122	..	5	..
18. Labana	56	..	2	..	60. Jhiwar	372	11	15	22
19. Tagah .. ..	..	5	..	11	61. Others .. ..	..	1	..	2
20. Lodha .. ..	..	2	..	4	Leather workers	1,621	49	64	101
21. Thakkar .. ..	..	1	..	3	62. Chamar	1,140	16	15	93
22. Naik .. ..	..	1	..	3	63. Machhi	435	..	17	..
23. Others	243	2	10	4	64. Khatik .. ..	..	3	..	8
(c) CULTIVATORS AND CATTLE	911	24	36	50	65. Others	46	..	2	..
REARERS.					Basket makers and mat-makers	89	..	4	..
24. Dogar	74	..	3	..	Scavengers	1,363	24	54	49
25. Gujjar	628	13	25	27	66. Chitra	750	14	30	30
26. Ahir	203	11	8	23	67. Massala	361	..	11	..
27. Others	6	..	..	..	68. Dhanak	87	5	3	9
(d) GRAZERS AND DAIRYMEN	53	3	2	6	69. Dagi and Koli	165	5	7	10
28. Gadarai .. ..	..	2	..	5	70. Others .. ..	..	..	..	..
29. Others	53	1	2	1	Traders and pedlars	1,929	121	77	247
(e) FISHERMEN, BOATMEN, ETC	749	12	30	26	71. Khatri	456	9	18	18
30. Jhiwar	372	11	15	23	72. Aron	716	..	29	..
31. Machhi	279	1	11	3	73. Bania	374	31	15	64
32. Mallah	74	..	3	..	74. Sheikh	257	80	10	164
33. Others	24	..	1	..	75. Others	126	1	5	2
(f) HUNTERS AND FOWLERS	147	..	6	..	Carriers by pack animals	24	1	1	2
34. Mahtani	94	..	4	..	Priests and devotees	1,395	52	56	107
35. Others	53	..	2	..	76. Brahman	998	38	10	78
(g) EXTRACTION OF MINERALS	44	2	2	4	77. Sayad	250	11	10	23
36. Agari .. ..	..	2	..	1	78. Baragi .. ..	..	1	..	2
37. Others	44	..	2	..	79. Jogi	70	1	3	2
(h) BARBERS	361	6	14	11	80. Others	78	1	3	1
38. Nai	361	6	14	11	Bards	30	..	1	..
(i) WASHERMEN	167	4	7	7	Astrologers	1,010	38	40	79
39. Dhobi	167	4	7	7	81. Brahman	998	38	10	79
(j) WEAVERS AND CARDERS	1,988	55	79	112	82. Others	12	..	..	..
40. Julaha	647	9	26	19	Writers	7	7	..	15
41. Chamar	1,140	46	45	93	Singers and dancers	348	1	14	3
42. Kashmiri	170	..	7	..	83. Mirci	237	..	9	..
43. Others	31	..	1	..	84. Bhandi	62	..	3	..
Dyers	156	1	6	2	85. Others	49	1	2	3
44. Chhimba	125	1	5	2	Labourers	30	..	1	..
45. Others	31	..	1	..	Domestic Servants	30	2	1	4
Tailors	38	..	2	..	Village watchmen and menials	66	..	3	..
Carpenters	1,032	7	41	15	86. Barwala .. ..	..	..	..	..
46. Tarkhan	616	5	24	10	87. Others	277	3	11	5
47. Ramgarhia	78	..	3	..	Others	277	3	11	5
48. Lohar	323	2	13	5	88. Faqir .. ..	..	..	..	..
49. Others	15	..	1	..					

SUBSIDIARY TABLE II.

Variation in caste, tribe, since 1881.

CASTE OR TRIBE.	PUNJAB.	DELHI.	PUNJAB AND DELHI.										Percentage of net variation 1881—1921.
	Persons (000's omitted).							Percentage of variation increase (+), decrease (-).					
	1921	1921	1921	1911	1901	1891	1881	1911—1921	1901—1911	1891—1901	1881—1891		
1	2	3	4	5	6	7	8	9	10	11	12	13	
1. Ahir	203	11	214	209	205	196	173	+2.5	+1.5	+4.6	+13.5	+23.6	
2. Arain	1,091	3	1,094	978	1,007	889	795	+11.8	-2.9	+13.3	+11.8	+37.5	
3. Arora	716	..	716	674	653	570	512	+6.3	+3.3	+14.6	+11.3	+39.9	
4. Awan	440	..	440	426	421	369	332	+3.4	+1.1	+14.2	+11.0	+32.6	
5. Bania	374	31	405	404	452	442	437	+0.3	-10.5	+2.3	+1.1	-7.2	
6. Barwala	66	..	66	64	69	64	55	+3.5	-7.3	+7.6	+16.5	+20.4	
7. Bharai	62	..	62	58	66	67	56	+5.9	-11.1	-1.9	+20.0	+10.9	
8. Biloch	531	..	531	552	468	359	311	-0.1	+13.8	+30.2	+15.7	+71.3	
9. Brahman	998	38	1,036	1,018	1,123	1,107	1,069	+1.8	-0.3	+1.4	+3.5	-3.1	
10. Chamar	1,140	46	1,186	1,129	1,208	1,178	1,066	+5.0	-6.6	+2.6	+10.5	+11.2	
11. Chhimba	125	1	126	129	152	145	103	-2.9	-14.6	+4.8	+40.0	+21.5	
12. Chuhra	750	14	764	926	1,189	1,188	1,052	-17.4	-22.1	+0.1	+12.9	-27.4	
13. Dagi and Koli ..	165	5	170	175	155	170	176	-2.8	+13.1	-8.8	-3.7	-3.4	
14. Dhanak	87	5	92	83	77	74	66	+10.2	+7.6	+5.2	+11.5	+39.0	
15. Dhobi	167	4	171	156	147	139	124	+9.5	+6.0	+5.6	+12.5	+37.7	
16. Dogar	74	..	74	68	75	70	63	+8.6	-8.8	+7.7	+10.1	+17.5	
17. Dumna	40	..	40	79	59	60	71	-49.0	+34.1	-14.9	-2.2	-43.1	
18. Faqir	277	3	280	280	386	313	114	-0.1	-27.5	+23.3	+174.9	+145.6	
19. Gharath	137	..	137	171	170	174	160	-19.9	+6	-2.0	+8.3	-14.4	
20. Gujjar	628	13	641	610	632	614	552	+5.8	-3.3	+2.9	+11.1	+16.0	
21. Jat	5,464	48	5,512	4,957	4,942	4,430	4,167	+11.2	+0.3	+11.5	+6.3	+32.3	
22. Jhiwar	372	11	383	360	400	468	426	+6.3	-21.7	-1.7	+9.7	+10.4	
23. Jogi-Rawal	81	1	82	83	76	91	90	-1.5	+10.2	-17.2	+1.4	-8.5	
24. Julaha	647	9	656	635	657	625	586	+3.3	-3.3	+5.1	+6.6	+11.9	
25. Kamboh	199	..	199	172	174	151	130	+15.3	-0.9	+15.3	+10.5	+53.4	
26. Kanet	288	..	288	404	390	370	346	-28.6	+3.6	+5.4	+6.9	-16.6	
27. Kashmiri	170	..	170	178	193	196	152	-4.8	-7.9	-1.3	+29.1	+11.8	
28. Khatri	456	9	465	433	436	419	393	+7.4	-0.9	+4.2	+6.6	+18.3	
29. Khoja	87	..	87	63	99	90	62	+38.1	-36.6	+10.4	+44.7	-55.8	
30. Khokhar	69	..	69	60	108	130	36	+15.4	-44.4	-16.9	+204.7	+94.2	
31. Kunhar	574	9	583	550	569	515	467	+5.9	-3.3	+10.4	+10.4	+24.9	
32. Labana	56	..	56	58	56	55	47	-2.6	+3.4	+2.3	+15.8	+19.3	
33. Lohar	323	2	325	323	351	323	291	+0.6	-7.7	+8.7	+10.9	+11.9	
34. Machhi	279	1	280	280	236	189	161	+0.3	+18.3	+25.0	+17.1	+73.8	
35. Mahtam	94	..	94	82	83	57	52	+15.3	-1.2	+45.4	+8.9	+80.3	
36. Mali	94	8	102	104	113	181	66	-1.7	-8.2	-37.7	+176.0	+55.0	
37. Maliar	89	..	89	90	81	Not available		-1.3	+10.9	Not available.		..	
38. Mallah	74	..	74	78	73	77	62	-4.3	+6.3	-5.3	+25.6	+21.0	
39. Meo	114	4	118	130	147	121	116	-9.1	-11.2	+21.6	+3.7	+1.8	
40. Mirasi	237	..	237	227	247	229	192	+4.5	-8.1	+8.2	+19.4	+24.1	
41. Mochi	435	..	435	419	415	380	332	+3.7	+1.1	+9.1	+14.7	+31.1	
42. Moghal	89	4	93	99	98	118	92	-5.2	+3	-16.9	+29.2	+2.1	
43. Mussalli	361	..	361	310	57	Not available.		+16.6	+439.2	Not available.		..	
44. Nai	361	6	367	350	376	357	324	+4.5	-6.9	+5.5	+10.1	+18.1	
45. Pathan	267	17	284	292	264	195	188	-2.7	+10.8	+35.6	+3.7	+51.5	
46. Qassab	122	..	122	120	118	108	92	+2.6	+1.2	+9.2	+18.5	+34.3	
47. Qureshi	96	2	100	71	53	Not available		+40.2	+33.9	Not available.		..	
48. Rathi	118	..	118	98	38	101	85	+20.7	+154.2	-61.9	+18.5	+38.6	
49. Rajput	1,880	27	1,907	1,635	1,798	1,759	1,662	+16.6	-9.0	+2.2	+5.8	+14.7	
50. Saini	128	2	130	113	127	125	153	+14.9	-11.0	+1.1	-17.9	-75.1	
51. Sayad	250	11	261	247	238	215	200	+5.5	+3.8	+10.6	+7.8	+30.6	
52. Sheikh	257	80	337	339	321	332	336	-6	+5.4	-3.3	-1.1	+0.2	
53. Sunar	128	1	129	158	177	163	145	-17.9	-10.6	+8.7	+12.5	-10.3	
54. Tarkhan	616	5	621	646	681	618	563	-3.9	-5.0	+10.1	+9.8	+10.3	
55. Teli	313	3	316	296	322	301	261	+6.6	-7.9	+6.6	+15.7	+21.1	

CHAPTER XII.

Occupation and Industries.

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SECTION VI.—CONDITIONS OF LABOUR AND COTTAGE INDUSTRIES.

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Section I.—General survey of occupations.

216. The statistics of occupation and industries will be found in Imperial Tables XVII to XXII. Table XVII is a general table, showing the number of persons following each group of occupation, according to the scheme of classification prescribed by the Census Commissioner, for each district and State, and for the four cities of Lahore, Amritsar, Multan and Delhi. Table XVIII shows the subsidiary occupation of persons whose principal occupation is agriculture. This table is sub-divided into three parts for (1) rent receivers, (2) rent payers, and (3) farm servants and field labourers. Reference to Statistics.

Table XIX gives the number of persons pursuing certain selected subsidiary occupations combined with certain principal occupations.

Table XX shows the distribution of occupations by religion for each province as a whole, and for the cities of each province.

Table XXI furnishes particulars of occupations of selected castes and races in areas where they are especially numerous or otherwise important. The occupations are arranged under 13 main heads which correspond to the sub-classes of the scheme of classification.

Table XXII which embodies the results of the industrial census is divided into seven parts :—

Part I shows for the province as a whole the number of persons employed in each kind of industry, distinguishing between industrial establishments in which mechanical power is used, and those in which it is not, and classifying them according to the number of persons employed.

Part II gives the district figures without the classification of establishments according to power and number of persons employed given in Part I.

Part III gives the classification of industrial establishments according to the class of owners and managers.

Parts IV and V deal with the caste, race, and birth-place of skilled and unskilled workmen respectively in selected industries.

Part VI furnishes details of the power employed in factories.

Part VII gives the number of looms in use in textile establishments.

The salient features of the statistics are exhibited in the following two sets of Subsidiary Tables appended to this chapter:—

Occupational Subsidiary Tables.

- I. General distribution by occupation (Punjab and Delhi).
- II. Distribution by occupation in Natural Divisions.
- III. Distribution of agricultural, industrial, commercial and professional population in Natural Divisions, Districts and States.
- IV. Occupations combined with agriculture (where agriculture is the subsidiary occupation).
- V. Occupation combined with agriculture (where agriculture is the principal occupation).
- VI. Occupation of females by sub-classes and selected orders and groups (Punjab and Delhi).
- VII. Selected occupations 1921, 1911 and 1901.
- VIII. Occupations of selected castes (Punjab and Delhi).
- IX. Number of persons employed on the 18th March 1921 on Railways and in the Irrigation Department, in the Punjab and Delhi.
- IX-A. Number of persons employed in the Post Office and Telegraph Department on the 18th March 1921 in the Punjab and Delhi.

Industrial Subsidiary Tables.

- I. Distribution of industries and persons employed.
- II. Particulars of establishments employing 20 or more persons in 1911 and 1921.
- III. Organisation of establishments.
- IV. Place of origin of skilled employees.
- V. Place of origin of unskilled employees.
- VI. Distribution of certain races in certain industrial establishments.
- VII. Proportional distribution of adult women and of children of each sex in different industries.
- VIII. Distribution of power.

Actual entries of occupation returned are given according to groups and in alphabetical order in Appendix B to Part IV of the Census Report.

System of enumeration and nature of information.

217. The system of enumeration was the same as in 1911. Of the 16 columns in the census schedule, three were provided for the entry of occupation

OCCUPATION OR MEANS OF SUBSISTENCE OF ACTUAL WORKERS.			For dependants the occupation of the workers by whom supported.
Principal.	Subsidiary.		
9	10	11	

as given in the margin. In column 9 was to be entered the principal occupation or means of livelihood of all persons who actually did work or carried on business whether personally or by means of servants, or who lived on the income of private

property or on their pensions, etc. Column 10 was reserved for any occupation which the actual worker, shown in column 9, might pursue in addition to his principal occupation, or for any supplementary means of livelihood which he might possess. It was specially laid down that column 10 was to be left blank in the case of dependants, or those persons who had no additional occupation. In the case of women, children and old or infirm persons who did not do work or carry on business, either personally or by means of servants, the principal occupation of the head of the family or other person who supported them was to be shown in column 11. These general instructions were supplemented as in 1911 by special directions issued regarding the filling in of each column. The directions put briefly were:—

- (1) Column 9.—Only those women and children should be shown as workers who help to augment the family income. To illustrate this rule it was stated that a woman who looked after

her house and cooked the food was not a worker but a dependant, whereas a woman, who collected and sold firewood or cowdung was thereby adding to the family income and should be shown as a worker. Similarly, a woman who regularly assisted her husband in his work (e.g., the wife of a potter who fetches the clay from which he makes his pots) was an actual worker, but not one who merely rendered a little occasional help.

- (2) Vague words like "Labour" or "Service" or shopkeeping should be avoided. In the case of service, distinction should not only be made between the different kinds of service, but the exact occupation followed should be recorded. In the case of clerks, the occupation of their employers must be shown. Persons living on agriculture must be distinguished as rent receivers (*malik*) and rent-payers (*mazariah*).

Column 10.—Where a man has two occupations the principal one is that on which he relies mainly for his support and from which he gets the major part of his income. Subsidiary occupation should be entered if followed at any time of the year (whether followed throughout the year or during a part of it)."

In spite of the clear instructions issued, and of the trouble taken by district officers to train the enumerators, the entries returned in the schedules are not free from doubt. In numerous cases, particularly in the Multan district, generic terms like "Labour" and "Service" were used, and such entries for want of exact specification were classified as belonging to the general group. It is for this reason that the number returned under the head "Insufficiently described occupation" is excessive.

The compilation of Table XVII showing occupations of population was very difficult, and every precaution was taken to make it as accurate as possible. An alphabetical index of occupation was prepared in Urdu on the basis of the index supplied by the Census Commissioner. The task of marking the occupation entered in the sorters' tickets of Table XVII with the group number was entrusted to one Inspector, who was placed in charge of a batch of selected compilers trained previously for this purpose. The work of the Inspectors was supervised by the Personal Assistant who was in general charge of the compilation office.

When this branch of the work was finished, the group totals were transferred to the compilation sheets.

218. The table in the margin shows the number of classes, sub-classes, orders and groups into which occupations were separated at the last four censuses. The only alterations in the classes since 1911 is that arising from the inclusion of sub-class 9 (persons living on their income) in class D instead of class C. This alteration was made after Imperial Table XVII was printed, and in consequence the figures in that table in columns 1,013 to 1,018 must be diminished by the figures in the corresponding columns 1,203 to 1,208 of sub-class 9: the corresponding columns for the totals in class D must be increased by the same figures.

	1891.	1901.	1911.	1921.
Classes	7	7	4	4
Sub-classes ..	..	..	12	12
Orders	24	24	55	56
Groups	478	520	169	191

alteration was made after Imperial Table XVII was printed, and in consequence the figures in that table in columns 1,013 to 1,018 must be diminished by the figures in the corresponding columns 1,203 to 1,208 of sub-class 9: the corresponding columns for the totals in class D must be increased by the same figures.

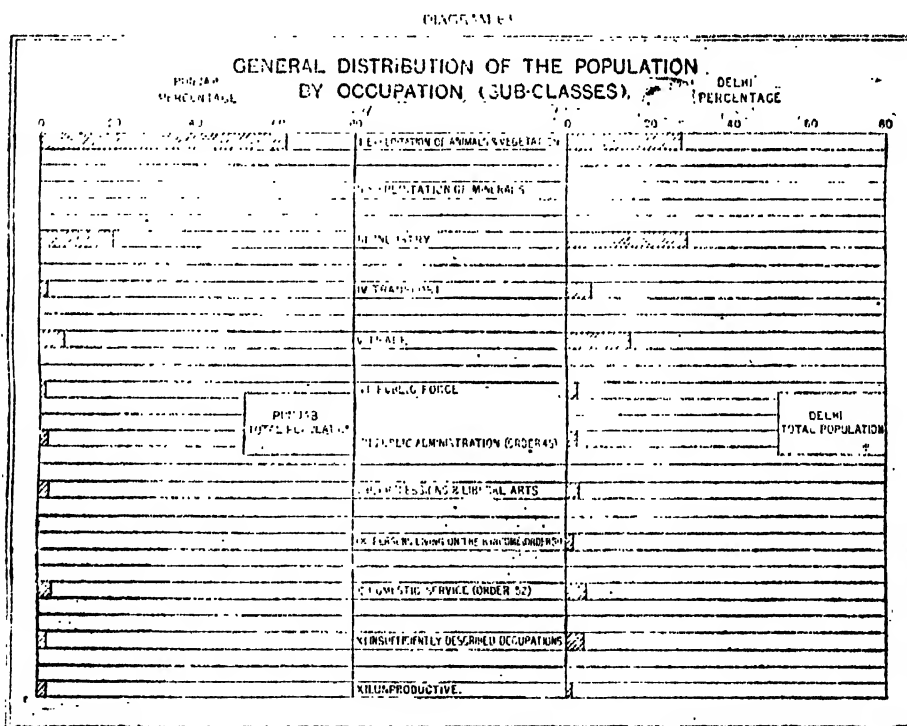
The only change in the orders is the addition of order 56 "other unclassified non-productive industries". When we come down to the groups however there is a considerable increase in their number as well as a shuffling of occupations between the groups. It is clear, therefore, that while comparison between the numbers of persons engaged in the various classes, sub-classes, and orders of occupations for the years 1911 and 1921 is feasible, it is very difficult indeed to make a comparison of the occupations in the different groups. So far as progressive changes are concerned we are not in a position to make a comparison with the conditions obtaining prior to 1911.

General distribution of occupations in the provinces.

219. The statement noted below exhibits the actual and proportional distribution of population of the provinces by occupational classes and sub-classes, the supported population including both actual workers and dependants.

CLASS AND SUB-CLASS.	PUNJAB.		DELHI.	
	Population (supported).	No. per 1,000 of the population.	Population (supported).	No. per 1,000 of the population.
A.—PRODUCTION OF RAW MATERIALS	15,213,502	606	143,050	293
I.—Exploitation of animals and vegetation	15,191,205	605	142,310	291
II.—Exploitation of minerals	22,297	1	740	2
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	7,044,618	281	256,314	525
III.—Industry	4,834,248	193	150,766	309
IV.—Transport	487,600	19	29,926	61
V.—Trade	1,722,710	69	75,622	155
C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS	958,411	38	35,141	72
VI.—Public force	263,269	11	9,500	20
VII.—Public Administration	158,828	6	8,742	18
VIII.—Professions and Liberal Arts	536,314	21	16,899	34
D.—MISCELLANEOUS	1,884,529	75	53,683	110
IX.—Persons living on their income	63,915	3	4,376	9
X.—Domestic service	639,103	25	23,688	48
XI.—Insufficiently described occupations	572,931	23	19,989	41
XII.—Unproductive	608,577	24	5,630	12

The above distribution is exhibited graphically in Diagram 63 below :—



Punjab Industries.

220. From the statement and illustrative diagram the premier position which agriculture holds among the industries of the province is clearly emphasised, 60·5 per cent. of the population depending on agriculture for their means of subsistence. Out of a total of 15,213,502 persons supported by the production of raw materials no less than 15,191,205 persons are supported by the exploitation of animals and vegetation ; of the persons engaged in the exploitation of animals and vegetation 99·9 per cent. depend on pasture and agriculture for their livelihood, and 0·1 per cent on fishing and hunting. The total number of workers and dependants supported by ordinary cultivation (as distinct from the growing of special products and market gardening, forestry and raising of farmstock) is 14,775,303. Over 12½ millions, or almost exactly half of the population, are ordinary cultivators ; just over 1 million, or 4 per cent., live on the income from

the rent of agricultural land; 2 per cent. of the population or 506,000 are farm-servants and their dependants, and 628,000 ($2\frac{1}{2}$ per cent.) belong to the group field-labourers and their dependants. Only 39.5 per cent. of the population depend on employment other than agriculture for their means of livelihood; of these 19 per cent. are engaged in industries of different kinds (5 per cent. in industries of dress, 4 per cent. in textile industries and the remainder in other industries). The number registered under the head Transport is 487,660 (2 per cent. of the population). Of the total population supported by transport as a means of occupation 408,333 persons (84 per cent.) are employed in transport by road and rail; trade supports nearly 7 per cent. of the population; public administration and liberal arts 3.8 per cent. The miscellaneous class accounts for 7.5 per cent. of the population. Professional beggars alone number 585,186 or nearly four times as many as public servants, civil employees and their dependants, and it actually exceeds the total number of persons (536,314) supported by all the professions and liberal arts put together.

221. The population of the Delhi Province recorded for the 1921 census was 488,188, of whom no less than 304,420 live within the limits of the municipality, the Imperial Area, old and new cantonments and civil lines, thus less than 38 per cent. of the Delhi Province lives in rural areas, and it is not therefore surprising to find that only 29 per cent. are dependent on cultivation. Industries support 31 per cent. of the population, trade 15.5 per cent., and miscellaneous occupations 11 per cent., of which domestic service accounts for 4.8 per cent., and professional beggars less than 1 per cent., compared with 2.3 per cent. of professional beggars in the Punjab. Whether this disproportion in the number of beggars in the Punjab as compared with the Delhi Province is due to the absence of charitable sentiments in the latter place, I am unable to say. Delhi Industries.

222. National prosperity is generally measured by the value and variety of a country's material possessions, its food, and houses; by the mechanical power at its disposal, its instruments of precision in use for scientific research and for the practical arts of navigation, medicine, surgery, and warfare; by its objects of luxury and virtue, its books, its paintings, its music, its ornaments, and by its games. Economic Cross-cleavage of occupations.

Now the material resources of no country, even of such vast extent as the United States of America, provide all the requisites of modern civilisation in its highest form, and some of them have to be brought from abroad. As imports have to be paid for by exports, it is clear that unless a country has the most exceptional variety of natural resources it cannot be prosperous without exports. It is conceivable for example that America endowed as she is with coal, iron, cotton, wood, and water-power, would be fairly prosperous without exporting anything; but the Punjab, for half a century at least, is hardly likely to produce a tithe of the various articles which modern civilisation demands, and without exports would have to forego most of the benefits which modern civilisation confers on the nation which can buy outside the confines of its own borders.

Thus from the stand-point of natural welfare the various occupations may be grouped into (1) occupations concerned wholly or partially with exports, (2) occupations concerned solely in the production of articles of local consumption. It would be foolish to assert that one group is more important than the other; both groups contribute to the natural well-being; but it is the occupations that lead to export that are the safer gauge of that surplus production of wealth which every nation must secure if she is to be prosperous.

This conception leads to the economic cross-cleavage by virtue of which all occupations may be regarded as productive of an exportable surplus or not. It may be objected that theoretically there is no economic distinction between the labour of a man who grows 5 acres of wheat of which one acre is exportable surplus, and that of a man who grows tobacco for his own consumption, both add to the gross wealth of the province; but only the former adds to its net wealth, that is to its transferable capital. As it is the accumulation of capital which enables great developments in industries to proceed, the distinction appears to be valid, in spite of its resemblance to the doctrines of the Physiocratic School.

Now taking the figures for 1920-21 the value of all the articles exported from the Punjab was about 40 crores of rupees of which only 3 groups of articles supplied exports of over 1 crore of rupees, these being grains and pulses (23 crores) oilseeds ($1\frac{1}{2}$ crores) and raw cotton ($4\frac{1}{2}$ crores). Thus these three agricultural

products (food-grains, cotton and oilseeds) together provide about 75 per cent. of the total value of the provincial exports. Of the remaining 10 crores of rupees worth of annual exports, raw materials form the larger proportion. The only important articles manufactured in the Punjab which are exported are chemicals (11 lacs), leather (11 lacs), iron and steel (48 lacs) and sugar (82 lacs). Thus the province has moved but a very little way towards the preparation of its natural products for immediate human use, and we are justified, therefore, in saying that the exportable surplus, and, in consequence, the wealth of the province is dependent almost wholly on agriculture, and that without the production of that excess quantity of raw material the annual increase in the wealth of the province crores would be diminished by nearly 35 crores of rupees. If, therefore, the Punjab is to forego the value of its exported agricultural produce, while maintaining its annual income, there would have to be a gigantic development of industrial enterprise so as to balance the loss of 30 crores or more which is annually exported from the province as raw material. Such a development seems to be out of the question during the next decade.

The Premier position of agriculture

223. It has already been noted that agriculture supports over 60 per cent. of the population of the Punjab. Of the total number (15,191,205) supported by agriculture 35 per cent. are actual workers, male and female, and a large proportion of these are peasant proprietors. But the Punjab is by no means wholly a country of peasant proprietors, and according to Mr. Calvert, there is an increasing tendency for it to become a country of petty landlords living on rent. This tendency is very marked in the figures of the last decade, as the number of persons living on income from rent of agricultural lands has increased from 626,000 in 1911 to 1,008,000 in 1921. On the other hand the numbers of farm servants and field labourers has actually decreased from 1,192,000 in 1911 to 1,134,000 in 1921. Mr. Calvert writes:—

“I am inclined to think that the increase in rent-receivers is to a considerable extent covered by persons who are able to represent themselves as living on rent owing to the rise in prosperity. Rawalpindi and Jhelum have amassed large sums during the War; Lyallpur, Shahpur and Gujrat have amassed wealth by the rise in price of agricultural produce. The decline in labourers and the increase in the number of tenants indicate a tendency to rent the land rather than cultivate through hired labour.”

Mr. Calvert estimates the number of owners of holdings of over 48 acres to be about 200,000. If we take the number of persons per family as 4·5, that is to say, equal to the number of persons per occupied house in the Punjab, the number of persons supported by the rent of agricultural lands will be about 900,000, which agrees very closely with the 886,000 shown for total workers and dependants by the census figures.

Industries other than agriculture.

224. When the importance of agriculture to the wealth of the province has been appreciated, the fact that other industries exist in the Punjab may be noted. Some of these are actually important, but the majority of them can only be regarded at present as in their infancy, and are therefore only of potential value to the province. Of the 28·1 per cent. of persons engaged in the preparation and supply of material substances just over two-thirds are engaged in industries the proportion of workers and dependants among the different industries being, as noted in the margin. Thus the most important industries at the moment are

Proportion of persons in different industries in the Punjab.

Textiles	..	21·0	per cent.
Hides, skins, and hard material from the animal kingdom	..	1·4	..
Wood	..	10·5	..
Metal	..	4·9	..
Ceramics	..	7·6	..
Chemical products	..	3·2	..
Food industries	..	4·4	..
Industries of dress and the toilet	..	26·4	..
Furniture industries	..	0·5	..
Building industries	..	3·3	..
other miscellaneous and undefined industries	..	17·0	..

those that come under the head “industries of dress and the toilet,” textiles, wood, ceramics and metal industries. Of those engaged in industries of dress and the toilet, shoe, boot and sandal makers provide no less than 51·2 per cent., while barbers, hairdressers and wig makers provide 26·1 per cent., and tailors, milliners, dress makers, darners and embroiderers of linen 12·2 per cent. Washing, cleaning and dying provides for 14·6 per cent. of persons, under this head.

The chief textile industry is that of cotton-ginning, spinning, sizing and weaving which provides for no less than 93 per cent. of persons engaged in the manufacture of textiles. The only other textile industry of present importance is that of the manufacture of rope, twine and string; but the industries of fibre preparation, wool-carding and spinning, silk-weaving and spinning, and the preparation of lace, crepe, and embroideries are all probably capable of a large amount of development, and are potentially important.

Of those engaged in wood industries, carpenters, turners and joiners provide 80.1 per cent., while basket-makers and thatchers and workers in bamboo and reeds support 17.4 per cent. of persons.

Of those engaged in ceramics the vast majority are provided by the potters and earthen-pipe and bowl-makers (79.4 per cent.) and brick and tile makers (19.4 per cent.), while there are 0.9 per cent. of persons engaged in the manufacture of glass bangles, glass beads, and necklaces and glass earstuds. The glass industry generally, which had a splendid opportunity during the war and the absence of Austrian competition, has failed to make much, if any, progress.

Of the workers in metal the vast majority are employed in the manufacture of implements and tools of iron (88.4 per cent.), while next come the workers in brass, copper and bell-metal (10.1 per cent.). Workers in other metals except precious metals (tin, zinc, lead, quicksilver, etc.) provide only 0.5 per cent. of all workers in metal. The number of goldsmiths and silversmiths has not been recorded independently and they appear under order 18, group 98, as "workers in precious stones and metals, enamellers, imitation jewellery makers, gilders, etc." As this group comprises no less than 175,696 persons, it seems likely that goldsmiths and silversmiths and their dependants exceed 100,000 in number.

The production of chemicals may be referred to as a potentially important and growing industry for which there may be a great future in the Sub-Himalayan region when the supply of electric power from the Himalayan foothills has become an accomplished fact; at anything like the cheap rate (150 rupees per kilowatt year) estimated by the experts. In particular the production of nitrates from atmospheric nitrogen may become a source of great wealth to the province. At the present moment the vast majority (94.4 per cent.) of persons engaged in chemical industries depend on the manufacture and refining of vegetable oils. The manufacture of soap, candles, lac, cutch, perfumes, and miscellaneous drugs account for 2.1 per cent., the manufacture of matches and explosive materials for 1.7 per cent., and the manufacture of aerated and mineral waters and ice 1.3 per cent. of the persons supported by the manufacture of chemical products.

225. The total number of workers and dependants under the head transport is 487,660, and these form 6.9 per cent. of those engaged in the preparation and supply of material substances. Transport.

Of those engaged in occupations under the sub-class transport, workers and their dependants engaged in transport by road account for just over one-half, while railway employees account for one-third, the remaining one-sixth being made up of workers and their dependants engaged in transport by air (0.1 per cent.), transport by water (11.8 per cent.), and workers and their dependants in the post office, telegraph and telephone services (4.4 per cent.). Of those engaged in providing transport by road the major portion are owners and drivers of camels, mules, asses and bullocks, who form 64.3 per cent. of all transport workers. The owners, managers and employees of country-carts and other vehicles account for 13.0 per cent. of transport workers.

226. The sub-class trade includes 22.4 per cent. of the workers and their dependants engaged in the preparation and supply of material substances, and occupations under this sub-class are divided into 17 orders and 34 groups. The largest order is that of "other trades in food-stuffs" which covers the large number of retail shopkeepers of oil, salt, fruit and vegetable sellers, grain, pulse, and tobacco sellers, and dealers in sheep, goats and pigs, hay, grass and fodder. In the present census the ordinary *nun-tel-seller* has been included under the order "other trades in food-stuffs," whereas in 1911 he did not appear under this head, so that the number of workers and dependants of the petty shopkeeper type appears to have increased from 5,248 in 1911 to 675,477 in 1921. Actually we must look to group 135 of the 1911 census to find the data for the numbers of petty food-sellers under the head "shopkeepers otherwise unspecified". As these were found to number 676,945 in 1911, the *nun-tel-seller* would not appear to be thriving. But the two census figures are not strictly comparable. Trade.

After the petty shopkeeper the most important trader is without doubt the money-lender. The term *bania* which is the ordinary equivalent for money-lender covers a much wider range of occupations than mere money-lending. According to the classification adopted at the present census, bank-managers, money-lenders, exchange and insurance agents, money-changers and brokers and their employees form a single group comprising 9.3 per cent. of those engaged in trade, while group 122 includes brokers, commission agents, commercial travellers, warehouse owners and their employees accounting for 1.5 per cent. persons engaged in trade. The variation in the numbers of money-lenders is examined in paragraph 237 below. After money-lending, trade in textiles occupies the most important position finding support for 7.5 per cent. of those engaged in trade. In addition, trade in skins, leather and furs supports 1.5 per cent. of those engaged in trade, and trade in wood 1.2 per cent. Trade in chemical products includes the preparation and sale of drugs, dyes, paints, petroleum, explosives, etc.

Trade in clothing and toilet articles furnishes support for 1.4 per cent. of those engaged in trade, while dealers and hirers in mechanical transport, motors, cycles, carriages, carts, boats, elephants, camels, horses, cattle, asses and mules, form 3.8 per cent. of all traders. Less than 1 per cent. of all traders are engaged in trade in metals, pottery, bricks and tiles, trade in building materials occupies 0.1 per cent. and dealers in fuel form 0.4 per cent. Traders of other sorts form 15.5 per cent. of the transport workers, and these are mainly general shopkeepers and shopkeepers otherwise unspecified.

Public ad-
ministration
and liberal
arts:

227. These occupations provide for the support of only 4.1 per cent. of the population, divided among the army and police (25.8 per cent.), public administration (15.5 per cent.), professions and liberal arts (52.3 per cent.) and persons living on their income (6.3 per cent.). Thus only just over 1 per cent. of the population is engaged on the protection of the province from external aggression and in the maintenance of internal law and order. These numbers can certainly not be said to be excessive. The total Imperial Army at the last census is given to be 74,614, which is only 0.36 per cent. of the population of British Territory, while the army of Indian States includes 9,515 males which is only 0.22 per cent. of their population. The total police force of the province, including village watchmen, is 27,357 for British Territory and 5,697 for the Punjab States, which is only 0.13 per cent. of the population both for British Territory and the Punjab States. Including village watchmen the actual numbers in the police were 33,054 which is less than 1 policeman for every 4 square miles of British Territory. In view of this and the preceding figures it can hardly be argued that the Punjab is over-policed.

The professions and liberal arts support 536,314 persons, or just over 2 per cent. of the total population.

Of those supported by the professions and liberal arts, religion accounts for 16.8 per cent., law 3.4 per cent., medicine 8.6 per cent., instruction 10.3 per cent., and letters and arts and sciences 16.7 per cent. The strong appeal which religious sentiment has for the most of people in the Punjab is well emphasised by these figures; indeed for the most part the people seem to prefer vicarious to personal religious exercises and observances. This conclusion must not be interpreted as implying an absence of deep religious feeling; on the contrary there are undoubtedly many devout and orthodox Hindus, Musalmans, Sikhs and Christians to whom religion means something more than mere adherence to dogma; but it is unquestionably true that religion is not merely symbolised by the idol, the prayer or the priest but is the religion itself in the eyes of the vast majority.

The number of lawyers of all kinds including Kazis, law agents and Mukhtars is 2,477 actual workers or just under 1 for every 10,000 inhabitants of the Punjab. This does not seem an unduly large number and it is to his prominence in the educated and political life of the community rather than to his numerical strength that the lawyer owes his apparent ubiquity.

Medicine accounts for 8.6 per cent. of the persons supported by public administration and liberal arts. This includes medical practitioners of all kinds, dentists, oculists, and veterinary surgeons, midwives, vaccinators, compounders, nurses, masseurs, etc.

Instruction accounts for the support of 10.3 per cent. of the persons engaged in the professions and liberal arts, school teachers forming a greater proportion of these.

The letters and arts and sciences support 89,516 workers and dependants. This would seem to be a satisfactory state of affairs until it is observed that 68·2 per cent. of these persons are music composers and masters, players on all kinds of musical instruments, singers, actors and dancers; while no less than 17·2 per cent. are conjurors, acrobats, fortune-tellers, and the like. The actual number of well-educated persons engaged in the pursuit of letters and arts and sciences is small, and is included in the groups 176 (architects, surveyors, engineers, and their employees) and 177 (authors, editors, journalists, artists, photographers, sculptors, astronomers, meteorologists, botanists, astrologers, etc.). These two groups together supply 4,350 male and 108 female workers. There are scarcely 20 research workers in the Punjab, so great is the neglect of the advancement of knowledge in the province.

228. The miscellaneous occupations of the province suffice for the support of 7·2 per cent. of the population, pretty equally divided between domestic service, insufficiently described occupations, and unproductive occupations. Domestic service need not be enlarged on, but among the insufficiently described occupations there are a certain number of persons who should be shown under the sub-class of trade or industry. The vast majority of this sub-class is provided by 'labourers and workmen otherwise unspecified' (group 187). Miscellaneous occupations.

Of the unproductive occupations, inmates of jails, asylums and hospitals form 2·6 per cent., while beggars, vagrants and prostitutes account for the remaining 97·4 per cent.

If we add to the unproductive persons (2·4 per cent. of the population) the numbers of persons living on their incomes we find that only 2·7 per cent. of the population are not contributing to the national income or are not dependants of those who do contribute. On the whole, therefore, the Punjab may be regarded as a nation of workers.

Section II.—Local Distribution of occupations.

229. In this section it is proposed to examine the local distribution of a few of the more important occupations of the Punjab, namely, of agriculture, industry as represented by a few specified groups of occupations, trade, the distribution of the money-lending class, of priests and ministers, and finally of the unproductive group of beggars, vagrants, witches and wizards. Diagrams based on the percentage of persons supported by each of these industries were prepared from the tahsil figures of occupations, and the isopleths were drawn. Unfortunately the exigencies of time and economy prevent their reproduction, and a verbal description must suffice. Introductory

230. As is well-known agriculture is a universally prevalent occupation, and only in one tahsil in the Punjab, that of Lahore, is less than one-third of the population supported by agriculture. Between Lahore 25 per cent. and Kulu 93 per cent. there is, however, a considerable diversity in the percentage of persons supported by agriculture. The regions in which the percentage is below average are those which are favourable to industry and trade; the tahsils in which reside the greatest percentage of persons supported by agriculture are in those zones where no alternative occupation is possible, namely, in the Sub-Himalayan region and in the tracts lying outside the area of perennial canal irrigation. If in fact we exclude the Sub-Himalayan Area the apparently anomalous conclusion is reached that the area which is most favourable to agriculture has the smallest proportion of persons engaged in this pursuit, while the unwatered deserts of the South-East Punjab, Dera Ghazi Khan and the Thall support a very high percentage of persons by agriculture. Local distribution of agriculture.

The explanation is simple. Agriculture is the primitive industry of the Punjab, and in those areas in which agriculture flourished in the past trade sprang up, roads were built, and there resulted that surplus of wealth which has always formed the loadstone of ability and enterprise. Where agriculture flourished industries have most readily flourished too. Put in other words we may say that surplus wealth is essential for industrial development, and each country can most readily obtain a surplus of wealth by following the path which its natural resources makes easiest. In future years, as in the past, the prosperity of Punjab industries is likely to depend on the prosperity of the basic occupation of agriculture.

A very notable area in which there is a high percentage of agricultural occupation, in spite of the fact, that it is well served by perennial irrigation is the Lower Bari Doab Colony, the explanation being of course that this colony is of recent development, and though many mandis and cotton-ginning factories have been set up, agriculture still supports more than 60 per cent. of the population. It would not be surprising if 10 years hence the number of persons supported by agriculture in the Lower Bari Doab Colony is less than 60 per cent., and approaching the 55 per cent. which obtains in the Lyallpur and Chiniot tahsils of the Lower Chenab Colony.

The same tendency is bound to be perceptible in the Ferozepore district and the Bahawalpur State where the extension of irrigation from the Sutlej Valley Project will be an accomplished fact in the near future. The 68 per cent. and 69 per cent. of persons engaged in agriculture in the Fazilka and Muktsar tahsils, respectively, cannot fail to be very much reduced before long by the influence of perennial irrigation. To sum up, therefore, we may say that canal irrigation draws people away from agriculture toward trade and industry. Paradoxical as it may seem the Punjab Canals are the chief industrialising agents of the province.

Local distribution of industries.

231. The groups named in the margin have been selected as representative of the industries of the Punjab. The groups support 2,144,379 persons, being

Group.	Total workers and dependants.
25. Cotton-ginning, cleaning and pressing	91,886
26. Cotton-spinning	108,201
27. Cotton-sizing and weaving	756,001
44. Carpenters, turners and joiners, etc.	407,267
48. Other workers in iron and makers of implements and tools, principally or exclusively of iron	211,486
55. Potter and earthen pipe and bowl-makers,	293,443
81. Barbers, hair dressers and wig-makers	276,095
Total	2,144,379

8·2 per cent. of the total population and being over 41 per cent. of the persons engaged in all industries. The local distribution stands out very clearly on the map as a T-shaped distribution, the head of the T stretching along the North-Western Railway from Rawalpindi to Ambala and the leg of the T down the Lyallpur Colony. As has been remarked in the previous paragraph, Punjab industries are flourishing in just those areas where agriculture flourishes and where good railway communications

have been developed as a matter of course.

Local distribution of trade.

232. The occupations specified in the 4 groups named in the margin, have been selected as representing the

Group.	Total workers and dependants.
121. Banks, establishments of credit, exchange and insurance (bank managers, money-lenders, exchange and insurance agents, money changers, and brokers and their employees)	161,483
123. Trade in textiles (trade in piece-goods, wool, cotton, silk, hair, and other textiles)	130,020
132. Grocers and sellers of vegetable oil, salt and other condiments	675,477
152. General store-keepers and shop-keepers otherwise unspecified	254,126
Total	1,221,109

chief occupations under this subclass. These occupations furnish a total of 1,221,109 persons, being 4·7 per cent. of the total population, and just over 71 per cent. of the persons engaged in trade. The local distribution is curious. The area in which over 5 per cent. of the population is engaged in trade covers about one-third of the Punjab, and forms in addition to a solid block of parts of the districts of Rawalpindi, Jhelum, Sialkot, Gujrat, Gujranwala,

Shahpur, Lyallpur, Mianwali, Multan, Muzaffargarh, Montgomery and Jhang, several isolated places like Pathankot, Amritsar, Dipalpur, Ludhiana, and Bhiani, together with a narrow stretch of territory between Ambala and Sonapat along the Ambala-Delhi Chord Railway.

Of the castes which are engaged extensively in trade the Aggarwal (79·1 per cent.), Arora (65·1 per cent.), Khatri (58·0 per cent.) are Hindu and the Khoja (50·2 per cent.) alone is a Musalman caste; so trade is a distinctively Hindu occupation, and it is not, therefore, surprising to find the greatest *proportion* of traders in the North-West Dry Area where Musalmans predominate. In the rest of the province where Hindus and Sikhs are more numerous than Musalmans the trading instinct of the Hindus is of smaller commercial value.

233. The Sub-Himalayan Area contains the greatest proportion of priests and ministers, under which head are classed Sadhus, Parohats, Mahants, Mullahs or Maulvis, Mujawars and Fakirs and others. these being more than 20 *per mille* of the total population in Daska, Zaffarwal, Pasrur and Raya of the Sialkot district, and in Pathankot and Shakargarh of the Gurdaspur district, and also in the tahsils of Hoshiarpur, Una, Garhshankar of the Hoshiarpur district, Samrala of the Ludhiana district, Naraingarh of the Ambala district, and Hamirpur of the Kangra district. Most of the Central Punjab contains between 10 and 20 priests and ministers *per mille* of population, while a very large tract of land in the North West Dry Area and in the South-East contains less than 10 priests and ministers *per mille* of population. Thus priests and ministers prefer the old settled districts to the colony areas, but are showing a tendency to migrate towards the latter. Priests and ministers as a class may be said to avoid areas in which famines were prevalent in the past and where scarcity of food may sometimes obtain even under present conditions.

Local distribution of priests and ministers.

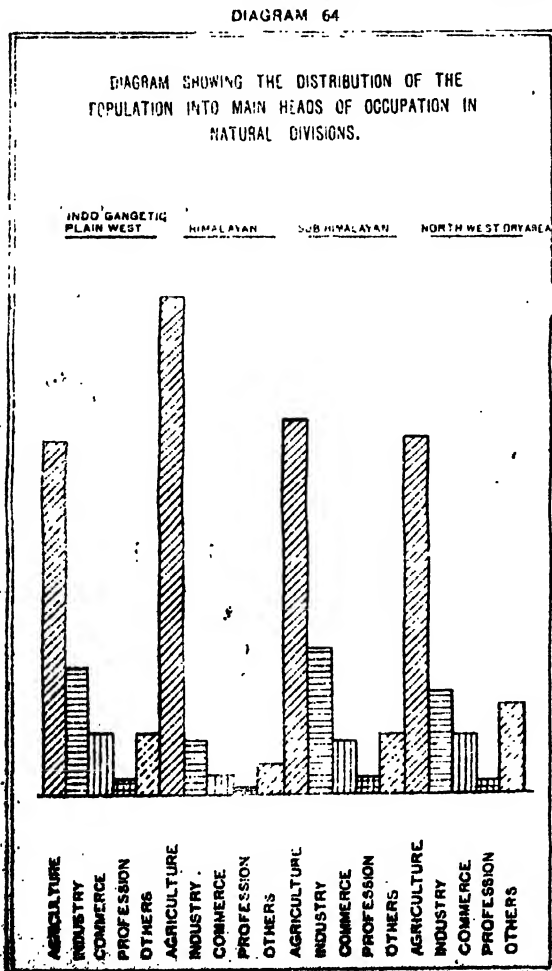
234. The total number of persons under group 189 is 590,514, of whom the actual workers are 208,784 males and 41,631 females. The profession of begging is one that apparently can be adopted at an early age, and it seems probable that the number of actual workers must exceed the number of dependants although this is contrary to the figures given by the census report. The local distribution of beggars corresponds very closely with what we know of the distribution of material wealth in the Punjab, the canal colonies showing the largest proportion of beggars and the South-East, extreme North, and the Himalayan region the smallest proportions.

Local distribution of beggars, vagrants, witches and wizards.

The general agreement between the ascertained local distribution of occupations and the distribution that might be anticipated *a priori* is evidence of the general relative accuracy of the occupational tables. In other words the amount of misclassification of occupations which occurs in the tables is probably roughly proportionate to the total population of each district or tahsil. The extent of systematic misclassification, however, cannot be determined from the consideration of the local distribution.

235. The main features of the distribution of population by main heads

Distribution by natural divisions.



of occupations is shown in the accompanying diagram which shows for each of the natural divisions the relative number of persons engaged in agriculture, industry, commerce, professions and other occupations. As already noted in paragraph 230 agriculture provides a relatively large proportion of occupations in the Himalayan region; industry flourishes in the Sub-Himalayan tract; trade is very strongly represented in the North-West Dry Area; while professions are most common in the Sub-Himalayan and Indo-Gangetic Plain West and are least important in the Himalayan tract.

Section III.—Comparison with Previous Censuses.

Difficulties
of
comparison.

236. It has already been pointed out in paragraph 218 that an entirely new scheme of classification was introduced in 1911, 4 classes and 12 sub-classes replacing the 7 classes of 1901, the number of orders being increased from 24 to 155 and the number of groups reduced from 520 to 169. In spite of the complete change of classification an attempt was made at the last census to compare the number of persons supported for each group in 1901 and 1911, and the results are shown in Subsidiary Table VII of Chapter XII of the 1911 census. This table shows more conclusively than any amount of argument, how impossible it is to trace the variation of persons engaged in different occupations at two epochs if there has been any change in classification. If we were to accept Subsidiary Table VII of the 1911 Census at its face value the only conclusion would be that within the 4 major classes of occupation Punjab labour and industry was most remarkably fickle and volatile. Nothing could be further from the truth, as it is well known that it is the hardest thing in the world for a Punjabi to break

Table showing change in occupation between 1901 and 1911 from the Subsidiary Table VII of Chapter XII, Census 1911.

1. Income from rent of agricultural land ..	—9	per cent.
2. Ordinary cultivators ..	+168·6	"
3. Agents, managers of landed estates (not planters), clerks and collectors, etc. ..	+730·9	
4. Farm servants and field labourers ..	+174·9	
6. Tea, coffee, cinchona, rubber and indigo plantations ..	88·7	
7. Fruit, flower, vegetable, betel, vine, arcanut, etc., growers ..	+15·8	
8. Wood cutters, etc. ..	+165·1	

loose from the bonds of his traditional occupation. Some alteration in the numbers of persons engaged in the occupational groups would be expected during the course of a decade, but it is quite impossible that variations of the extent noted in the margin can be genuine. The figures chosen are not selected for their particularly high percentage of variation, and prove simply that comparison by groups from one census to another, where the groups have been altered in any way, is out of the question.

The difficulty exists, even if in a slightly less pronounced form, in comparing

Class and sub-class.	Population supported per 1,000 of the total population in		Variation per cent. in strength since 1911
	1911.	1921.	
A.—PRODUCTION OF RAW MATERIAL ..	601	600	+5·6
I.—Exploitation of animals and vegetation ..	600	599	+5·7
II.—Exploitation of minerals ..	1		—36·2
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES ..	298	285	+1·7
III.—Industry ..	203	195	+1·4
IV.—Transport ..	30	20	—27·0
V.—Trade ..	65	70	+15·6
C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS ..		39	—4·4
VI.—Public Force ..	11	11	+2·7
VII.—Public administration ..	6	6	+11·1
VIII.—Professions and liberal arts ..	25	22	—11·2
D.—MISCELLANEOUS ..	59	70	+35·5
IX.—Persons living on their income ..	2	3	+15·8
X.—Domestic service ..	21	26	+30·5
XI.—Insufficiently described occupations ..	11	23	+124·1
XII.—Unproductive ..	25	24	+2·5

of minerals, has declined from 36,132 to 23,037. The decrease is undoubtedly due to increasing vagueness in the description of occupation, and this is borne out by the great increase in the numbers under sub-class 11 "insufficiently described occupations" in which the number of persons has increased by 124 per cent. Nor does

Group.	Actual workers (males).
19. Coal mines ..	1,107
21. Mines and metallic minerals (gold, iron, manganese, etc.) ..	4
22. Other minerals (jade, diamonds, limestone, etc.) ..	3,565
23. Rock, sea and marsh salt ..	688
24. Extraction of saltpetre, alum, and other substances soluble in water ..	3,167
Total	8,531

the number of persons (3,427) employed in mines as determined at the Special Industrial Census, taken only 2 months after the general Census, tally with the figures of the Census itself, for which the numbers of actual workers are shown in the margin. Then again the falling off occurring in the number of transport workers is inexplicable except on the

assumption that a certain number of persons engaged in that occupation have now preferred to describe themselves as traders, in which the percentage variation in strength is + 15·6 per cent.

237. Partly as illustrative of the foregoing arguments, but mainly because of its own intrinsic interest, a comparison between the number of money-lenders in different districts at the last 2 censuses has been attempted.

Change in
the number
and distribu-
tion of money-
lenders.

In 1911 money-lenders were included together with bank managers, exchange and insurance agents, money-changers, brokers, etc., in group 106 while in 1921 they are included in group 121 which comprises also bank managers, exchange and insurance agents, money-changers and brokers and their dependants. In 1911 the total number of workers and their dependants was 193,890 as compared with 166,960 in 1921, from which one might conclude that the number of money-lenders has very much decreased during the last decade. The possibility, however, suggests itself that some money-lenders (who will usually describe themselves as "banias," have been entered under group 107 (brokers, commission agents, commercial travellers, warehouse owners and employees) in 1911, corresponding with group 122 in 1921. Comparing these two groups we find an increase of 10·3 per cent. The safest course, therefore, to adopt is to add together groups 106 and 107 in 1911 and compare it with sum of the groups 121 and 122 in 1921. The sum of the two groups shows a decrease of 10·4 per cent., and there is a strong probability, therefore, that the number of money-lenders in the Punjab has decreased during the 10 years 1911-1921.

If we study the local distribution of this decrease in different parts of the Punjab we find that most of the province has shared in it, the only districts in which there is an increase of over 10 per cent. being Rawalpindi, Lahore, Ferozepore, Hissar, Karnal and Rohtak and the States of Kalsia, Nahan and Nabha. The greatest increases of all (over 50 per cent.) are shown by the districts of Hissar and Rohtak. Mr. Calvert believes that the growth of the Co-operative Credit Societies in the Central Punjab has driven the money-lenders away towards the canal colonies. That the money-lender is disappearing from Hoshiarpur, Jullundur where the number of Co-operative Credit Societies is largest is undoubted, but the Census evidence, so far as it goes, shows that the money-lender prefers to migrate to the South-East Punjab rather than to the colonies. The districts of Lahore and Ferozepore show a marked increase in the number of money-lenders in spite of the fact that there are over 300 Credit Societies in both these districts. On the other hand the number of money-lenders has decreased very much during the last decade in the districts of Dera Ghazi Khan, Muzaargarh and Multan where the growth of the co-operative movement is less rapid than in most parts of the Punjab.

238. To sum up, there has been very little change in the main occupations of the province during the decade and the observed variations are probably almost entirely due to errors of classification. Thus agriculture then, as now, supported just over 60 per cent. of the population. The persons engaged in the preparation and supply of material substances has nominally fallen from 29·7 per cent. to 28·1 per cent.; the persons engaged in public administration and liberal arts has diminished from 4·5 per cent. to 4·1 per cent.; while the miscellaneous class has increased from 5·7 per cent. to 7·2 per cent. The only conclusion we can draw from these figures is that there has been no significant change in the occupations of the province. The same conclusion applies to most of the occupations under the different orders, though, here and there, there may be a significant change: for example, the percentage of persons engaged in the preparation of chemical products out of those engaged in industry has risen from 2·6 per cent. to 3·2 per cent. The percentage engaged in the industries of dress and toilet from 23·3 per cent. to 26·4 per cent. of those engaged in industries. The diminution in the number of those engaged in general transport and in transport by road, in particular, has already been commented on, and possibly is a real decrease off-set by the increase in transport by rail from 21·0 per cent. of all transport workers in 1911 to 33·2 per cent. in 1921. Under the head "trade" the *nun-tel-seller* is the disturbing element, and the difficulties of classifying him prevent any detailed comparison under the different occupational orders of this sub-class. Under "public administration and liberal arts" the proportionate number engaged in "public administration" has increased from 14·0 per cent. to 15·5 per cent., and this is doubtless

Summary
of changes
since 1911.

a real increase, as also is the increase in the number of those engaged in instruction from 6·7 per cent. to 10·3 per cent. Finally the increase in the miscellaneous class from 5·7 per cent. to 7·2 per cent. of the population is due to the greater use of the sub-class "insufficiently described occupations" in which are put all doubtful cases.

Thus the census figures alone throw but little light on present day industrial tendencies.

Section IV.—Occupations by Caste and Female Occupations.

Principal
occupation
of each caste.

239. The statistics of occupation of selected castes, tribes, or races are given in Imperial Table XXI. and this discriminates between the religion and locality dealt with; while Subsidiary Table VIII shows the proportion of persons in each caste dependent on the various forms of occupation for a livelihood, and also the percentage of the number of female workers to male workers. Of the 80 castes, races and tribes examined cultivation of all kinds is the principal occupation of 32 castes. Only one caste has, as its principal occupation field-labour and wood-cutting, and that is the Chuhra Sikh, of whom 34·8 per cent. are engaged in these occupations. The castes whose principal occupation is that of

Percentage of persons of each caste who are artisans or workmen.

Barwala (Musalman)	.. 34·8	Kumhar (Musalman)	.. 63·2
Chamar (Hindu)	.. 48·2	Lohar (Hindu)	.. 53·8
.. (Sikh)	.. 51·0	.. (Musalman)	.. 71·3
Chuhra (Hindu)	.. 69·5	Mussalli ..	.. 41·8
.. (Sikh)	.. 58·3	Nai (Hindu)	.. 75·2
.. (Musalman)	.. 61·5	.. (Sikh)	.. 66·2
Chuhra (Hindu)	.. 67·7	.. (Musalman)	.. 80·2
.. (Sikh)	.. 31·8	Qassab ..	.. 48·4
Dhanak (Hindu)	.. 35·3	Sunar (Hindu)	.. 85·1
Dhobi (Musalman)	.. 71·0	.. (Musalman)	.. 47·7
Julaha (Hindu)	.. 46·3	Tarkhan (Hindu)	.. 61·1
.. (Musalman)	.. 78·2	.. (Sikh)	.. 61·0
Kashmiri ..	.. 54·7	.. (Musalman)	.. 72·5
Kumhar (Hindu)	.. 53·9	Teli ..	.. 56·3

Percentage of persons of each caste in public service.

Aggarwal (Hindu)	.. 1·3 per cent.
Arora (Hindu)	.. 2·1 per cent.
Arora (Sikh)	.. 2 per cent.
Brahman (Hindu)	.. 1·9 per cent.
Khatri (Hindu)	.. 4·7 per cent.
Khatri (Sikh)	.. 4·0 per cent.
Mughal (Musalman)	.. 2·0 per cent.
Pathan (Musalman)	.. 2·9 per cent.
Qureshi (Musalman)	.. 2·6 per cent.
Sayad (Musalman)	.. 3·3 per cent.
Shoikh (Musalman)	.. 3·6 per cent.

artisans or workmen are shown in the margin. The trading castes are the Aggarwal Hindu, of whom 79·1 per cent. are engaged in trade; the Arora Hindu and Sikh of whom 65·1 per cent. and 63·1 per cent. are engaged in trade; the Khatri, Hindu and Sikh of whom 58·0 per cent. and 45·9 per cent. are engaged in trade, and the Khoja of whom 50·2 per cent. are engaged in trade. The marginally noted castes have more than 1 per cent. of their numbers in public service.

4·6 per cent. of Europeans and 11·8 per cent. of Anglo-Indians have occupations in public administration. Of the castes which have a certain number of persons who live on their income, the Aggarwal Hindu, Sikh Arora, the Khatri both Hindu and Sikh, and Anglo-Indians are the most prominent.

Occupations
of women.

Occupation.	Caste which has the greatest percentage of persons engaged in that occupation.	Percentage of persons engaged in the occupation.
Cultivation of all kinds	.. Meo ..	97·0
Raising of livestock	.. Sansi ..	9·9
Field labourers and wood cutters.	.. Sikh Chuhra ..	34·8
Industries	.. Sunar Musalman ..	87·7
Transport	.. Anglo-Indians ..	44·8
Trade	.. Aggarwal Hindu ..	79·1
Public Force	.. Europeans ..	80·5
Public Administration	.. Armenians ..	25·0
Religion	.. Sayad ..	38·4
Domestic Service	.. Jhiwar Sikh ..	78·9
Beggars, prostitutes, criminals, inmates of jails and asylums.	.. Mirasi ..	76·6

Domestic service is the principal occupation of the Barwala and Jhiwar. Begging or criminal occupations are the chief means of livelihood of the Bharai, the Fakir, the Harni, the Mirasi, the Pakhiwara and the Sansi.

The highest percentage of persons engaged in some of the chief occupations are noted in the margin.

240. Statistics of the actual number and proportion of male and female workers in selected orders and groups are given in Subsidiary Table VI separately for the Punjab and Delhi provinces. The orders and groups selected are those in which female workers exceed 100 per mille of their total population or in which the proportion of female workers to male workers is high.

In the Punjab 11 per cent. and in Delhi 10 per cent. of the persons returned as actual workers were women. 58 males out of every 100 are actual workers in both the provinces, while the corresponding percentage among females is 9. The list of occupations in which female workers are specially numerous in the Punjab is given below :—

Group.	Occupation.	Number of females per 1,000 male workers.
6	Tea, coffee, cinchona, rubber and indigo plantations	324
15	Bird, bees, etc.	120
21	Mines and metallic minerals (gold, iron, manganese, etc.)	750
26	Cotton-spinning	9,686
29	Rope, twine, and string	296
31	Wool-carding and spinning	1,244
38	Lace, crepe, embroideries, fringes, etc., and insufficiently described textile industries..	1,616
65	Rice pounders and huskers and flour grinders	2,356
66	Bakers and biscuit makers	409
67	Grain parchers, etc.	1,225
76	Hat, cap and turban makers	1,046
87	Stone cutters and dressers	462
101	Others, including managers, persons (other than performers) employed in theatres and other places of public entertainment, employees of public societies, race course service, huntsmen, etc.	307
102	Contractors for the disposal of refuse dust, etc.	863
103	Sweepers, scavengers, etc.	607
135	Cardamom, betel-leaf, vegetables, fruit and arecanut sellers	350
139	Dealers in hay, grass and fodder	458
172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	1,516
190	Procurers and prostitutes	8,916

There are certain occupations in which women considerably outnumber men, as for example cotton-spinning, rice-pounding and flour-grinding, and grain-parching.

In connection with the relative paucity of female workers in the ranks of actual workers found in both the provinces, the remarks made by Mr. Calvert in his book "Wealth and Welfare of the Punjab," are very suggestive. In discussing the economic causes of Punjab poverty he writes :—

"There is a vast waste of female labour, due primarily to custom and prejudice. In most other countries the proportion of female labour to the whole is high; while its efficiency is equal to the tasks performed; the contribution to the national dividend resulting from this forms an appreciable part of the whole. If there were in Western countries a movement aiming at the exclusion of female labour from all except purely domestic tasks, that movement would endanger the whole economic fabric, and, if successful, would involve those countries in ruin. The Punjab discards what in England and elsewhere is an absolutely necessary element in the maintenance of their civilisation. The fact that there are tribes, such as Brahmans and Rajputs, which do not allow their womenfolk even to work in the fields is alone sufficient to explain their poverty. The work of women as clerks, shopkeepers, post and telegraph operators, factory hands, etc., and in connection with the fish industry, market garden, pit-tops, etc., has no counterpart here. In the course of generations the loss from this waste alone must have made material progress almost impossible. No European country could maintain its present standard of living without the assistance derived from female labour."

-I suspect, however, that a very large part of the apparent want of employment of female labour arises from the fact that the classification of occupations was drawn up by men and not by women; many women appear as unemployed when they should be classed as actual workers engaged in domestic duties, in cooking, grinding of grain, drawing water from wells, taking food to their families in the field, preparing and mending clothes, and last but certainly not least in child-bearing. In fact the occupational tables will have to be completely revised before a fair comparison of the extent of male and female occupations can be drawn.

Section V.—The Industrial Census.

Nature of
the Statistics

241. The statistics relating to the number and type of industrial establishments and the employees therein are embodied in Imperial Table XXII. The data were based on the information supplied on two special schedules filled up by the owners or managers of all concerns in which at least 10 persons were employed on any normal working day between the 14th March and 14th May 1921. Schedule A included descriptions of the mine, factory or other industrial establishment, the nature of the article produced in it, the nature of the ownership and the number, sex, race or nationality of the owners or directors and of the managers, supervisors and clerical staff, the number and nature of the power engines, state of the industry, whether perennial or seasonal, and the number of looms in actual operation in textile establishments. Schedule B was used for recording the caste, race and birth-place of skilled and unskilled labourers together with their occupations. The detailed instructions for filling in various columns of the schedule were as follows:—

SCHEDULE A.—

Column 1.—State what the nature of the establishment is, *e. g.*, jute-press, jute mill, woollen carpet, weaving factory, glass works, etc.

Column 2.—A general description only is required of the principal commodity manufactured, *e. g.*, coal, cotton, goods, glass-goods, vegetable oil, etc.

Column 3.—Where any important bye-product is manufactured which has a distinct commercial value this should be entered in this column, *e. g.*, coke, or coal gas. If the same establishment turns out several distinct classes of goods or one class of goods at one season and another at another season, the most profitable should be entered in column 2 and the other or others in column 3.

Column 4.—Ownership.—State whether the establishment is owned by (a) Government, (b) a local authority (*i. e.*, municipality, port trust, etc.), (c) a registered company, (d) is privately owned. If a registered company state the name under which it is registered.

Column 5.—Number, sex and race or nationality of directors or owners:

(a) This column will be blank in the case of establishments owned by Government or a local authority.

(b) Give the total number of directors or owners. Enter the number of British or Anglo-Indians. In the case of others give the nationality of Europeans and foreigners, *e. g.*, American, Swiss, Chinese, etc. For Indians state whether, Hindu, Sikh, Moham-madan or "others." In the case of foreigners who are British subject enter the letter B in brackets after the nationality; Give separate figures for females, if any.

Specimen entry.—Directors total 10, one British, one Anglo-Indian, one Swiss (B), one American, two Mohammadans, one Parsi, three Hindus.

Column 6.—Race or Nationality of Manager.—Enter as in the preceding column. If a female, state this.

Column 7.—For supervising and technical staff the number by sex and race.—This heading will include assistant manager, heads of departments and sections, inspectors, engineers, special technical experts and advisers, etc. It should not include Foreman, Mates or Mukkaddams who are of the same general class as the operatives.

Column 8.—Clerical Staff—Enter the particulars for all persons employed on clerical work in the establishment, such as clerks, accountants, writers, copyist, etc.

Column 9.—Number and nature of power engines with horse power—

(1) In the case of power engines other than electric generators or motors enter how many engines of each class (steam, oil, etc.), there are in use and the horse-power of each engine, *e. g.*, three steam—one 25 horse-power and two 20 horse-power: four oil—three 15 horse-power and one 10 horse-power, etc.

(2) Electric power is either (a) generated on the premises by steam, water or oil primemovers, or (b) supplied from outside by agreement. In the case of (a) enter (i) how many (steam oil, etc.), primemovers there are in use and the horse-power of each and, (ii) how many electric dynamos there are in use and the power (in Kilowatts) of each.

In the case of (b) enter how many electric motors are installed and their total horse-power.

Column 10.—State of Industry.—Enter whether the establishment works—

(a) throughout the year, or

(b) during a part of the year only.

In the case of (b) state the months during which or during part of which the establishment works or is likely to work in the census year.

Column 11.—Number of looms.—To be filled up in the case of cotton, silk, woollen or jute mills and establishments only.

SCHEDULE B.—

Column 1.—Enter the name of each person;

Column 2.—Enter the sex, male or female.

Column 3.—Adult means 14 years or over; child means under 14 years.

In the case of children, enter the actual age in years after the word "child."

Column 4.—Ask each person what his caste is and enter what he says if he gives an intelligent answer. If he says Mohammadan, Parsi, Sikh, enter this. If he says Hindu ask him his caste Brahman, Koshla, Chamar, etc., and enter it. If he is an aboriginal he should give the name of his tribe Gond, Kol, etc. If he is an Anglo-Indian or Indian Christian enter this. If he is a foreigner enter his nationality, *e. g.*, Chinese.

Column 5.—Enter the district or State in which he was born and if the district or State is outside the province of enumeration enter also in brackets the province or agency. If a foreigner, enter his country.

Example.—Jullundur, Lahore, Howrah, (Bengal), Mirzapur (United Provinces), China, Jaipur State (Rajputana).

Column 6.—Enter skilled for those who are employed on works requiring special technical skill and training and are paid above the rates for unskilled labour. For the rest leave blank.

Column 7.—Enter their actual personal occupation in the establishment at the time in the case of skilled operatives only, *e. g.*, fitter, cotton-weaver, engine-driver, carpenter, etc.

The statistics of the Industrial Census are probably fairly reliable as the information was supplied by the owners or managers themselves, but a comparison of the annual report on Factories 1921, with Census Table XXII shows that 21 registered factories were omitted from the census record. The list is given below:—

District.	Number of Establishments.	Description.	Average daily number of persons employed.
GOVERNMENT AND LOCAL FUND FACTORIES.			
Ferozepore	1	Arsenal	1,698
Lahore	1	Acroplane workshop	216
Lahore	1	Rasin factory	70
Gujranwala	1	Railway engineering workshop	240
Rawalpindi	1	Gas works	43
Mianwali	1	Railway engineering workshop	32
ALL OTHER FACTORIES.			
Hissar	1	Railway workshop	60
Gujranwala	1	Ice, mineral and aerated water factory	30
Gujranwala	1	Rice mill	32
Multan	4	Despatch box and hospital furniture manufactory	161
Rohtak	1	Cotton ginning, cleaning and pressing factories	52
Ferozepore	5	Oil mill	20
Ferozepore	1	Cotton ginning, cleaning and pressing factories	140
Lahore	1	Oil mill	58

Number of
Industrial es-
tablishments
and em-
ployees.

242. The total number of factories, mines, mills and other industrial establishments in the Punjab and Delhi is 801 and the total labour employed is 61,771 males and 4,755 females : of these 31,652 males or half the total number are skilled labourers, and 908 females, or one-fifth of the number of female workers are skilled workers. The type and number of industrial establishments is shown in the marginal table together with the number of employees, male and female.

Industrial establishments.	Total No. estab- lishments.	TOTAL OF PERSONS EMPLOYED.	
		Males.	Females.
Growing of special products ..	34	1,726	303
Mines ..	17	3,355	72
Quarries of hard rocks ..	24	1,967	199
Textile and connected industries	203	11,804	1,731
Leather industries ..	15	418	9
Wood industries ..	8	661	..
Metal industries ..	37	3,324	2
Glass and earthenware industries	7	317	24
Industries connected with chemi- cal products.	14	257	15
Food industries ..	115	4,658	132
Industries of dress ..	9	520	..
Furniture industries ..	9	334	..
Industries connected with build- ings.	199	8,150	2,258
Railway Workshops ..	32	17,809	3
Production, application and trans- mission of physical forces.	16	1,738	1
Printing presses ..	62	4,733	6

It will be noticed that the railway workshops alone en-
gage more than one-fourth
of the total industrial workers
in the two provinces : in-
dustries connected with tex-
tiles employ more than one-
fifth. The other industries
which engage more than 3,000
persons are mines, metal in-
dustries, food industries, print-
ing-presses and industries
connected with building. The
highest proportion of children,
viz., 449 per 1,000 adults, is
found in the glass and earthen-
ware industries ; tea factories
also contain a fair proportion

of children, there being 20 children to every 100 adults.

Local dis-
tribution
of
industries

243. The local distribution of industrial and manufacturing concerns is

No.	District or State.	No. of Es- tablish- ments.	No.	District or State.	No. of Es- tablish- ments.
1	Lahore ..	121	21	Hissar ..	9
2	Amritsar ..	87	22	Karnal ..	9
3	Rawalpindi ..	50	23	Simla ..	9
4	Patiala State ..	50	24	Sheikhpura ..	9
5	Shahpur ..	43	25	Mianwali ..	9
6	Kangra ..	32	26	Jind State ..	9
7	Ambala ..	28	27	Hoshiarpur ..	8
8	Ludhiana ..	28	28	Jullundur ..	8
9	Lyallpur ..	28	29	Faridkote State ..	8
10	Gujrat ..	27	30	Kapurthala State ..	8
11	Montgomery ..	25	31	Ferozepore ..	7
12	Sialkot ..	23	32	Gujranwala ..	7
13	Mandi State ..	22	33	Gurgaon ..	3
14	Gurdaspur ..	18	34	Attock ..	2
15	Jhelum ..	16	35	Jhang ..	2
16	Nabha State ..	13	36	Muzaffargarh ..	2
17	Multan ..	11	37	Nahan State ..	1
18	Bahawalpur State ..	11		Delhi ..	38
19	Rohtak ..	10			
20	Dera Ghazi Khan ..	10		Total ..	801

given in part II of
Table XXII and a
summary of it is
reproduced in the
margin.

Of the total num-
ber of 763 industrial
concerns, Lahore,
Amritsar, Rawal-
pindi, Patiala State
and the Shahpur
district provide not
less than 351, the
reasons being that
conditions favour-
able to the growth
of one industry are
likely to be favour-

able to the growth of another, the existence of railway facilities, the supply of
power, whether by coal, oil, water or electricity, and the proximity of con-
nected industries being of prime importance. These considerations explain the
position of Lahore and Amritsar in the marginal table.

In Ambala of the 28 concerns employing 1,421 persons, 6 are connected
with cotton, 3 are flour mills, 3 flour mills and khar khas factories, 7 brick kilns,
3 railway workshops, 2 science apparatus works and 3 printing-presses and 1
is a glass factory. In Kangra, there are 28 tea factories, 3 slate quarries and 1
carpet factory, the number of operatives at work in these factories and quarries
being 2,345.

In Ludhiana 11 factories are connected with cotton, 1 is a flour mill, 8
are brick kilns, 2 ice factories and 6 tailoring establishments, the total number of
employees being 793. In Sialkot, which is well known for its manufacture of
sporting goods and metal works, no less than 18 factories employing 827 persons
were registered under these heads. In Gujrat out of 27 factories 5 are wooden
furniture factories and 19 brick kilns. In Shahpur there are 14 factories connected
with cotton, 3 flour mills, 22 lime kilns, 2 petroleum wells, 1 salt mine, and 1
coal mine. The total labour force is 1,493. In the newly colonised districts of
Montgomery and Lyallpur where cotton is grown on a large scale 32 factories,

or more than half the total number found in both the districts, are engaged in cotton-ginning and pressing. In Mandi State there are 6 tea factories and 16 slate quarries.

As regards the districts of Lahore, Amritsar, and Rawalpindi, Patiala State and Delhi province, which contain large cities and towns, the distributions of factories is as given below :—

Industry.	Lahore.	Amritsar.	Rawalpindi.	Patiala.	Delhi.
Mines	..	..	..	..	1
Cotton	23	22	1	11	..
Wool	1	6	..	..	..
Silk	..	7	..	..	..
Dyeing	..	1	..	..	..
Leather dyeing	10	1	..	..	..
Wood	4	..	..	..	..
Metal	7	5	3	..	2
Glass and earthen-ware	1	1	1	..	3
Chemical products	2	3	1	1	1
Food	8	13	4	19	3
Dress	1	1	1	..	..
Furniture	1	..	1	..	1
Building	23	20	18	13	19
Construction and transport	7	1	7	4	4
Production and transmission of physical forces	5	..	2	2	1
Luxury	28	6	1	..	2

Lahore exemplifies most types of industrialism except the silk and wool industry. The prominence of Amritsar depends mainly on textile and connected industries; it contains the only silk-reeling factory and dyeing factory found in the province employing more than 10 persons. In Rawalpindi and Patiala the high figures are due to the existence of many brick kilns. In Delhi the extensive building operations, consequent on the transfer of the seat of the Government of India to that city, alone accounts for half the number of factories enumerated there.

244. The marginal statement contrasts the number of establishment employing 20 or more persons in the Punjab and Delhi at the last two censuses.

Variation in establishments employing 20 or more persons in 1911 and 1921.

Establishments	NUMBER IN	
	1911.	1921.
All Industrial Establishments	443	538
Growing of special produce	41	23
Mines	10	17
Quarries of hard rocks	5	20
Textile and connected industries	104	154
Leather industries	3	10
Wood industries	1	5
Metal industries	37	19
Glass and earthenware industries	2	7
Industries connected with chemical products.	4	3
Food industries	61	50
Industries of dress	10	5
Furniture industries	4	6
Industries connected with buildings	97	141
Construction of means of transport	24	27
Production, application and transmission	6	11
Industries of luxury	34	40

These figures suggest a far greater industrial development than do the census figures proper. The general prosperity of the cotton trade, consequent on the high prices ruling during the war, and of the wide extension of the staple American cottons is emphasised by the number of new mills set up in Shahpur, Montgomery and Lyallpur. The growth of the building industry is also indicated by the figures and, it can hardly be doubted, represent the facts better than do the census figures which show an actual falling off in the total number of workers and dependants from 272,168 in

1911 to 159,261 in 1921. An important feature of the decade has been the exploitation of the petroleum fields in the Attock district.

245. The details of the number and kind of industrial establishments classified according to the caste or race of the owners and managers is given in part III of Table XXII and shows that the Khatri, Aggarwal and Sheikh in the order named have the greatest number of persons as owners and managers. The figures are

Caste of owners, managers and workers in industrial establishments.

Caste.	Establishments.	
	Owners.	Managers.
Khatri	301	329
Aggarwal	51	60
	55	60

noted in the margin. It will be noticed that the Khatri and Aggarwal castes together furnish owners and managers of about half the total number of industrial establishments in the Punjab. This is no doubt due in part to the organising ability of the Khatri and Aggarwal, but is also a consequence of their commanding a large proportion of the floating capital of the country.

The caste, race or birth			
Caste.			Number of skilled work-ers in indus-trial establish-ments accord-ing to caste.
Sheikh	..	..	4,230
Arain	..	..	2,900
Lohar	..	..	2,418
Khatri	..	..	1,700
Tarkhan	..	..	1,620
Brahman	..	..	1,460
Rajput	..	..	1,380

STATEMENT SHOWING NUMERICAL STRENGTH AND CASTE OF UNSKILLED WORKERS.

Caste.	Number.
Sheikh	1,985
Brahman	1,975
Arain	1,944
Rajput	1,768
Jat	1,763
Chamar	1,683
Khatri	1,396

cent. of foreign-born people. It is clear that the skilled workmen is definitely more ready to migrate than the average person.

Table XXII, and it shows that out of 28,442 skilled workmen (male, female, children and adult,) 15,777 or over 55 per cent. are provided by 7 castes alone. The numerical strength of skilled workers in these castes is noted in the margin. Unskilled workmen are for the most part drawn from the same class as skilled workmen, Sheikh, Brahman, Arain, and Rajput contributing large numbers of workers both skilled and unskilled. The chief castes providing unskilled workmen are noted in the margin.

Thus it will be seen that the Lohar (iron-smith) and Tarkhan (carpenter) form the typically skilled labour castes, while the Jat and Chamar provide the typical unskilled workman. The Sheikh, Arain, Khatri, Brahman, and Rajput provide both skilled and unskilled workmen in considerable numbers.

Most of the skilled workmen are born in the province, only 11·3 per cent. coming from outside the Punjab, most of them from the United Provinces. As the Punjab contains only 2·5 per

Power-plant in industrial establishments.	POWER-PLANT.	ESTABLISHMENTS.	
		Punjab.	Delhi.
Steam and electricity	..	12	
Gas and Steam	..		
Steam only	..	277	
Oil only	..	66	
Water only	..	16	
Gas only	..	2	
Electricity generated on premises	..	1	
Electricity supplied from outside	..	40	
		414	16

246 Out of 801 factories in both the provinces, 414 in the Punjab and 16 in Delhi use mechanical power. The marginal table shows the number of factories employing the various forms of power generation. The total horse-power used in factories amounts to a little over 40,000. The details are given in the margin.

Handlooms.	Power-plant.	No. of establishments.		Horse-power.
Steam		239		18,259
Oil		66		1,349
Water		16		not known.
Gas		2		415
Electricity generated on premises		13		9,176
Electricity supplied from outside		40		killowatts. 12,964

247. A record of all handlooms in use in the Punjab and Delhi provinces was obtained, distinguishing between those on which the ordinary shuttle (*nal*) and the fly-shuttle (*Japani nal*) are used.

The instructions issued in this connection were as follows :—

“ During the preliminary enumeration the enumerator will record on the block list opposite the house of any cotton-weaver, or of any other person employing cotton-weavers, the number of looms (*khadi*) used by such person, and will record separately the number of looms with the ordinary shuttle (*desi nal*) and those with the fly-shuttle (*Japani nal*) which is worked by the foot. On the completion of the preliminary enumeration each enumerator will report the number of looms of each sort in his Circle to the Supervisor, who after collecting all such reports for his circle will forward them to the Charge Superintendent. The Charge Superintendent will prepare a return in the following form which he will send to the Tahsildar, before the 1st March :—

District Charge No.

Circle No.	Block No.	No. of LOOMS IN EXISTENCE.	
		With ordinary shuttle.	With fly-shuttle.
1	2	3	4

The Tahsildar will prepare a similar return for the Tahsil as a whole and forward it to the District Census Officer. The complete return for the District should reach the Provincial Superintendent before 15th March 1921."

The statistics collected from these reports show that cotton-weaving as a domestic industry is carried on by means of hand-loom in nearly every village of the Punjab and Delhi provinces. The total for the Punjab is 268,169 with ordinary shuttles and 2,338 with fly-shuttles (21,418 with ordinary shuttles and 1,559 with fly-shuttles for urban areas and 246,751 with ordinary and 779 with fly-shuttles for rural areas) and for Delhi 1,066 and 1 respectively.

Section VI.—Conditions of Labour and Cottage Industries.

248. As desired by the Census Commissioner, the Deputy Commissioners of districts and Census Superintendents of States were asked to send a brief note on the economic conditions prevailing in their districts and States under the following heads:—

- (i) Economic conditions and movements of labour.
- (ii) Density and overcrowding of labourers in towns and other centres of trades.
- (iii) Cottage industries.
- (iv) The influence of caste on industrial development.
- (v) Conditions of female labour in industries.
- (vi) Rural trade.

The summary of the information thus collected is given below for reference.

249. Inadequacy of labour is reported in Amritsar, Sialkot, Sheikhupura, Lyallpur and Muzaffargarh districts and Suket, Loharu and Nahan States. In all other districts and States of the province a sufficiency of labour, both skilled and unskilled, is reported. Agricultural labourers are usually drawn from low castes like the Chamar, Teli, Nai, Lohar, etc. The small number of agriculturists, who have become landless through want of drift, enter into partnerships in cultivation with their well-to-do brethren or work as agricultural labourers; but they regard it as beneath their dignity to do earth-work as in the excavation of canals and in the construction of rail and road embankments. Women and children help their own relations in cultivation, and are sometimes employed as agricultural labourers, specially at harvest times. The agricultural labourer is probably much better off than he used to be.

The old system of *begar* (forced through remunerated labour) has almost disappeared. The *kamin* or village labourer is no longer content with his hereditary dues, and the custom of payment in kind has saved the agricultural labourer from the effects of the rise in prices which has been going on more or less steadily during the last 60 years.

250. The conditions in which operatives live in large towns are probably more unhealthy than that of the average resident of a village. The remarks of the District Census Officer, Amritsar, which is a great industrial centre, are illuminating. He writes:—

"There are at this time nearly 1,000 regular labourers working in 79 industrial establishments in this city. Nearly 500 of these are permanent labourers, the others are constantly changing. The average number at normal times is 3,000 and rises to nearly 5,000 in the busy season. The labourers working in trade-marts are generally unskilled. As for their housing conditions, permanent labourers are sometimes provided with free quarters by the factory owners. Nearly all outside labourers have got free quarters; other labourers live in such houses as they can afford to rent, skilled labourers generally living in healthier surroundings than the unskilled. A great number live in narrow lanes. Their social status is low; an ordinary baboo getting Rs. 30 per mensem in an office claims superiority over a skilled labourer who is earning Rs. 100 monthly. The condition of unskilled labourers is still worse, the most fortunate among them get free quarters to live in factories and mills, others hire common shops in batches of 10 or 20. The remaining are houseless and sleep their night away on platforms of closed shops."

251. Cotton-weaving is generally done by means of handlooms by Chamars, Dhanaks and Julahas in all the villages. The village looms weave *khaddar*, *durries*, *towels*, *khes*, *dhotis* and other articles of ordinary use. The thread

used for fine cloth is usually a mixture of Purbi and Desi, while Desi thread is used for coarse cloth. The Purbi thread is imported from Cawnpore and Bombay and the Desi thread is manufactured locally. Village weavers generally weave for individual customers who supply their own yarn which is ordinarily home-spun. The weaver is paid either in cash or in kind. In certain cases cloth woven is sold by the weaver to the middleman who makes a profit of 6 pies per rupee and the weaver gains Rs. 5 to Rs. 8 per cent. of his outlay. The length of cloth woven per day by an ordinary weaver on a Desi loom is 8 to 10 yards, and on looms of Japan *Nal* 15 to 25 yards. The cost of an ordinary loom is from Rs. 12 to Rs. 20. The weavers usually work from 8 to 10 hours and are assisted by their wives and children in the preliminary stages of getting the thread ready for the work. After the warp is set up the weaving is done by men only. The standard of comfort amongst weavers is the same as that of agriculturists.

Other fairly common cottage industries are silk-worm-rearing which is being developed under the control of the Department of Agriculture, mainly in the districts of Gurdaspur, Amritsar and Sialkot; rope and string-making, curing of hides, pottery, oil-pressing and sugar extraction and shoe-making. Cottage industries generally are probably well-suited, within strict limitations to the present stage of the Punjab's industrial development, but many of them have inevitably to be crushed sooner or later by the more efficient system of mass production.

Speculative. 252. It has been pointed out that agriculture is the basic industry of the province and that during the last 30 years agriculture has been responsible for producing a considerable surplus of wealth. This surplus is an essential condition of industrial organisation, and for many years to come the profits from agriculture must be relied on to supply the capital for the establishment of industrial concerns. When cheap power becomes available and capital less shy than it is at present, it is possible that the Punjab may remain prosperous without having recourse to surplus production and to the export of agricultural produce. But this state of affairs, if it is to be permanent, must come about with a minimum of interference with healthy economic conditions. It is a mistaken belief to suppose that wealth derived from manufactures is in itself more desirable than wealth derived from agricultural pursuits.

I. General distribution by occupation (Punjab and Delhi). II. Distribution by occupation in Natural Divisions. III. Distribution of agricultural, industrial, commercial and professional population in Natural Divisions, Districts and States. IV. Occupations combined with agriculture (where agriculture is the subsidiary occupation) V. Occupations combined with agriculture (where agriculture is the principal occupation) VI. Occupation of females by sub-classes and selected orders and groups (Punjab and Delhi). VII. Selected occupations 1921, 1911 and 1901. VIII. Occupations of selected castes (Punjab and Delhi). XI. Number of persons employed on the 18th March 1921 on Railways and in the Irrigation Department in the Punjab and Delhi. IXA. Number of persons employed in the Post Office and Telegraph Department on the 18th March 1921, in the Punjab and Delhi.

(OCCUPATIONAL) — SUBSIDIARY TABLE I.

General distribution by occupation.

CLASS, SUB-CLASS AND ORDER,	NUMBER PER 10,000 OF TOTAL POPULA- TION.		PERCENTAGE IN EACH CLASS, SUB-CLASS AND ORDER OF		Percentage of depend- ants to actual workers.
	Persons supported.	Actual workers.	Actual workers.	Depend- ants.	
1	2	3	4	5	6
PUNJAB—					
CLASS A.—PRODUCTION OF RAW MATERIALS	6,061	2,121	35	65	186
SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATIONS	6,052	2,117	35	65	186
Order 1. Pasture and Agriculture	6,046	2,115	35	65	186
(a) Ordinary cultivation	5,886	2,022	34	66	191
(b) Growers of special products and market gardening	12	5	48	52	110
(c) Forestry	9	4	47	53	118
(d) Raising of farm stock	139	84	60	40	68
(e) Raising of small animals .. .. .	..	..	78	22	27
Order 2. Fishing and Hunting	6	2	34	66	188
SUB-CLASS II.—EXPLOITATION OF MINERALS	9	4	43	57	133
Order 3. Mines	1	..	41	59	142
Order 4. Quarries of hard rocks	3	2	46	54	117
Order 5. Salt, etc.	4	2	41	59	144
CLASS B.—PREPARATION AND SUPPLY OF MATERIAL SUB- STANCES.	2,807	1,020	36	64	175
SUB-CLASS III.—INDUSTRY	1,926	714	37	63	170
Order 6. Textiles	405	159	39	61	154
Order 7. Hides, skins and hard materials from animal kingdom	27	9	34	66	196
Order 8. Wood	202	69	34	66	192
Order 9. Metals	95	31	32	68	209
Order 10. Ceramics	147	51	35	65	188
Order 11. Chemical products properly so called as analogous	62	21	33	67	202
Order 12. Food industries	86	36	41	59	142
Order 13. Industries of dress and the toilet	509	176	35	65	189
Order 14. Furniture industries	2	1	33	67	199
Order 15. Building industries	63	25	39	61	150
Order 16. Construction of means of transport .. .. .	..	..	43	57	134
Order 17. Production and transmission of physical forces (heat, light, electricity, motive power, etc.)	1	..	38	62	163
Order 18. Other miscellaneous and undefined industries	327	137	42	58	138
SUB-CLASS IV.—TRANSPORT	194	73	38	62	165
Order 19. Transport by air .. .. .	..	..	49	51	105
Order 20. Transport by water	23	8	36	64	176
Order 21. Transport by road	98	35	36	64	180
Order 22. Transport by rail	64	27	41	59	143
Order 23. Post office, telegraph and telephone services	9	3	37	63	169
SUB-CLASS V.—TRADE	686	232	34	66	195
Order 24. Banks, establishment of credit, exchange and insurance	64	18	28	72	263
Order 25. Brokerage, commission and export	12	4	35	65	188
Order 26. Trade in textiles	52	16	31	69	218
Order 27. Trade in skins, leather and furs	10	4	36	64	180
Order 28. Trade in wood	8	3	36	64	180
Order 29. Trade in metals	2	1	38	62	163
Order 30. Trade in pottery, bricks and tiles .. .. .	..	..	41	59	144
Order 31. Trade in chemical products	11	4	33	67	199
Order 32. Hotels, cafes, restaurants, etc.	4	2	40	60	150
Order 33. Other trade in food stuffs	365	127	35	65	188
Order 34. Trade in clothing and toilet articles	10	3	34	66	190
Order 35. Trade in furniture	5	2	37	63	170
Order 36. Trade in building materials	1	..	32	68	212
Order 37. Trade in means of transport	26	9	33	67	204
Order 38. Trade in fuel	3	1	39	61	157
Order 39. Trade in articles of luxury and those pertaining to letters and the arts and sciences.	7	3	37	63	169
Order 40. Trade of other sorts	107	37	35	65	186

(OCCUPATIONAL)—SUBSIDIARY TABLE I.

General distribution by occupation—continued.

CLASS, SUB-CLASS AND ORDER.	NUMBER PER 10,000 OF TOTAL POPULA- TION.		PERCENTAGE IN EACH CLASS, SUB-CLASS AND ORDER OF		Percent- age of de- pendants to actual workers.
	Persons supported.	Actual workers.	Actual workers.	Depend- ants.	
PUNJAB—concluded.	2	3	4	5	6
CLASS C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS	382	150	39	61	158
SUB-CLASS VI.—PUBLIC FORCE	105	47	45	55	124
Order 41. Army	70	34	48	52	109
Order 42. Navy	..	..	67	33	50
Order 43. Air-force	..	..	74	26	35
Order 44. Police	35	13	38	62	163
SUB-CLASS VII.—PUBLIC ADMINISTRATION (Order 45)	63	23	36	64	180
SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS	214	80	37	63	168
Order 46. Religion	130	48	37	63	172
Order 47. Law	8	2	29	71	248
Order 48. Medicine	18	7	38	62	161
Order 49. Instruction	22	9	39	61	155
Order 50. Letters, arts and sciences	36	14	39	61	153
CLASS D.—MISCELLANEOUS	750	322	43	57	133
SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME (Order 51)	25	10	37	63	167
SUB-CLASS X.—DOMESTIC SERVICE (Order 52)	255	111	44	56	129
SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS. (Order 53. General terms which do not indicate a definite occupation).	228	95	42	58	139
SUB-CLASS XII.—UNPRODUCTIVE	242	106	44	56	130
Order 54. Inmates of jails, asylums and almshouses	6	5	84	16	18
Order 55. Beggars, vagrants, prostitutes	236	100	42	58	136
Order 56. Other unspecified non-productive industries	..	..	40	60	150
DELHI—					
CLASS A.—PRODUCTION OF RAW MATERIALS	2,930	908	31	69	223
SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION	2,915	904	31	69	222
Order 1. Pasture and Agriculture	2,903	901	31	69	222
(a) Ordinary cultivation	2,775	840	30	70	230
(b) Growers of special products and market gardening	65	27	41	59	142
(c) Forestry	13	3	59	41	70
(d) Raising of farm stock	49	26	53	47	88
(e) Raising of small animals	..	..	..	..	..
Order 2. Fishing and Hunting	12	3	26	74	290
SUB-CLASS II.—EXPLOITATION OF MINERALS	15	4	27	73	274
Order 3. Mines	..	..	43	57	133
Order 4. Quarries of hard rocks	7	3	40	60	147
Order 5. Salt, etc.	8	1	15	85	573
CLASS B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	5,250	2,240	43	57	184
SUB-CLASS III.—INDUSTRY	3,088	1,253	41	59	147
Order 6. Textiles	358	140	39	61	155
Order 7. Hides, skins and hard materials from animal kingdom	116	55	47	53	112
Order 8. Wood	142	63	44	56	127
Order 9. Metals	201	77	38	62	161
Order 10. Ceramics	207	86	42	58	140
Order 11. Chemical products properly so called and analogous	95	35	37	63	174
Order 12. Food industries	152	59	39	61	159
Order 13. Industries of dress and the toilet	802	279	35	65	187
Order 14. Furniture industries	19	9	47	53	112
Order 15. Building industries	373	180	48	52	108
Order 16. Construction of means of transport	7	3	45	55	123
Order 17. Production and transmission of physical forces (heat, light, electricity, motive power, etc.)	31	18	58	42	71
Order 18. Other miscellaneous and undefined industries	586	250	43	57	135

(OCCUPATIONAL)—SUBSIDIARY TABLE I.

General distribution by occupation—concluded.

CLASS, SUB-CLASS AND ORDER.	NUMBER PER 10,000 OF TOTAL POPULA- TION.		PERCENTAGE IN EACH (CLASS, SUB-CLASS AND ORDER OF		Percent- age of depend- ants to actual workers.
	Persons. supported.	Actual workers.	Actual workers.	Depend- ants.	
1	2	3	4	5	6
DELHI—					
SUB-CLASS IV.—TRANSPORT	613	301	49	51	104
Order 19. Transport by air	18	8	46	54	119
Order 20. Transport by water	272	124	46	54	119
Order 21. Transport by road	283	154	51	46	84
Order 22. Transport by rail	39	15	38	62	163
Order 23. Post office, telegraph and telephone services					
SUB-CLASS V.—TRADE	1,549	686	44	56	126
Order 24. Banks, establishment of credit, exchange and insurance	112	27	21	76	319
Order 25. Brokerage, commission and export	36	20	56	44	79
Order 26. Trade in textiles	252	123	19	51	105
Order 27. Trade in skins, leather and furs	15	7	44	56	126
Order 28. Trade in wood	19	9	50	50	100
Order 29. Trade in metals	13	9	67	33	49
Order 30. Trade in pottery, bricks and tiles	8	4	59	41	69
Order 31. Trade in chemical products	41	20	46	54	118
Order 32. Hotels, cafes, restaurants, etc.	17	10	58	42	74
Order 33. Other trade in food stuffs	579	239	41	59	142
Order 34. Trade in clothing and toilet articles	157	69	11	56	127
Order 35. Trade in furniture	26	10	11	59	145
Order 36. Trade in building materials	54	38	71	29	41
Order 37. Trade in means of transport	26	12	18	52	109
Order 38. Trade in fuel	17	7	41	59	143
Order 39. Trade in articles of luxury and those pertaining to letters and the arts and sciences	68	27	19	69	147
Order 40. Trade of other sorts	107	54	50	50	101
CLASS C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS	720	359	50	50	100
SUB-CLASS VI.—PUBLIC FORCE	196	123	63	37	59
Order 41. Army	146	98	67	33	50
Order 42. Navy					
Order 43. Air-force					
Order 44. Police	19	25	52	48	94
SUB-CLASS VII.—PUBLIC ADMINISTRATION (Order 45)	179	101	56	44	78
SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS	345	135	39	61	155
Order 46. Religion	153	54	36	64	181
Order 47. Law	20	7	34	66	192
Order 48. Medicine	57	27	48	52	110
Order 49. Instruction	65	24	38	62	166
Order 50. Letters, arts and sciences	50	23	45	55	122
CLASS D.—MISCELLANEOUS	1,099	641	58	42	72
SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME (Order 51)	90	40	44	56	126
SUB-CLASS X.—DOMESTIC SERVICE (Order 52)	485	281	58	42	73
SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS	409	266	65	35	54
(Order 53.—General terms which do not indicate a definite occupation.)					
SUB-CLASS XII.—UNPRODUCTIVE	115	54	47	53	113
Order 54. Inmates of jails, asylums and almshouses	5	1	17	83	476
Order 55. Beggars, vagrants, prostitutes	110	53	48	52	107
Order 56. Other unspecified non-productive industries					

(OCCUPATIONAL)—SUBSIDIARY TABLE II.**Distribution by occupation in Natural Divisions.**

OCCUPATION.	NUMBER <i>per mille</i> OF TOTAL POPULATION SUPPORTED IN					
	Punjab.	Indo-Gangetic Plain West.	Himalayan.	Sub-Himalayan.	North-West Dry Area.	Delhi.
1	2	3	4	5	6	7
SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION.	605	596	830	569	593	291
SUB-CLASS II.—EXPLOITATION OF MINERALS ..	1	1	1	1	..	1
SUB-CLASS III.—INDUSTRY	193	207	87	222	167	309
SUB-CLASS IV.—TRANSPORT	19	21	9	17	21	61
SUB-CLASS V.—TRADE	69	70	24	71	77	155
SUB-CLASS VI.—PUBLIC FORCE	10	10	6	18	6	20
SUB-CLASS VII.—PUBLIC ADMINISTRATION ..	6	6	3	5	10	18
SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS ..	21	21	14	27	18	34
SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME ..	3	3	3	3	1	9
SUB-CLASS X.—DOMESTIC SERVICE	25	27	10	31	22	49
SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS	23	14	6	16	51	41
SUB-CLASS XII.—UNPRODUCTIVE	24	24	7	20	34	12

(OCCUPATIONAL)—SUBSIDIARY TABLE III.

Distribution of the agricultural, industrial, commercial and professional population in Natural Divisions, Districts and States.

DISTRICT, STATE AND NATURAL DIVISION.	AGRICULTURE.			INDUSTRY (including mines).			COMMERCE.			PROFESSIONS.			OTHERS.		
	Population supported by agriculture.	Proportion of agricultural population per 100 of district population.	Actual work-ers.	Population supported by industry.	Proportion of industrial population per 100 of district population.	Actual work-ers.	Population supported by commerce.	Proportion of commercial population per 100 of district population.	Actual work-ers.	Population supported by professions.	Proportion of professional population per 100 of district population.	Actual work-ers.	Population supported by others.	Proportion of population supported by others per 100 of district population.	Actual work-ers.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PUNJAB	14,804,241	590	34 66	4,856,545	193	37 63	2,210,370	89	35 65	536,314	21	37 63	2,693,590	107	45 55
1. INDO-GANGETIC PLAIN WEST—	6,650,939	581	35 65	2,387,107	209	38 62	1,040,690	91	35 65	245,053	21	40 60	1,122,927	98	46 54
1. Hissar	546,221	609	31 66	116,137	112	36 64	71,293	87	31 69	12,696	16	37 64	70,553	86	45 55
2. Lohara State	12,702	619	32 68	3,741	181	23 77	1,211	60	20 80	909	11	11 52	1,908	96	21 76
3. Rohtak	488,160	612	32 68	162,625	216	36 64	65,639	85	32 68	12,815	14	42 58	13,033	56	15 55
4. Dujana State	15,900	616	39 61	5,124	198	33 67	2,130	82	28 72	428	17	3 00	2,251	87	33 67
5. Gurgaon	439,355	644	36 61	117,779	173	31 69	61,675	90	36 64	11,676	14	3 00	31,018	76	46 51
6. Patandi State	10,246	568	37 63	3,326	195	17 53	1,861	103	36 64	302	28	17 53	1,919	106	13 57
7. Karnal	502,115	606	36 64	173,712	209	31 69	70,233	85	37 63	15,606	19	46 54	64,016	81	19 51
8. Jullundur	470,711	518	36 64	228,798	278	39 61	71,289	63	36 64	23,285	28	38 62	68,161	83	11 56
9. Kapurthala State	169,753	597	31 66	71,610	232	3 66	1,331	55	31 66	6,166	19	39 61	21,915	77	44 56
10. Ludhiana	320,572	565	35 65	129,708	228	33 67	15,890	81	35 65	13,311	24	38 62	58,101	102	40 60
11. Malerkotla State	13,850	516	36 64	17,922	221	33 67	7,613	95	33 67	1,907	24	4 00	8,906	111	52 18
12. Ferozepore	693,972	632	31 66	221,975	202	35 65	60,299	63	33 67	13,905	13	40 60	99,007	90	42 58
13. Farukh State	109,724	728	33 67	17,847	118	31 66	12,533	85	40 60	826	6	16 53	9,334	63	38 62
14. Patna State	958,750	619	41 59	233,990	156	40 60	115,331	77	36 64	29,111	19	43 57	163,119	109	53 17
15. Jind State	209,096	618	31 66	51,629	168	33 67	22,159	72	31 66	3,918	13	42 58	21,361	69	19 51
16. Nabha State	162,917	675	35 65	13,926	167	26 61	21,378	81	38 62	9,825	37	33 67	2,6288	96	11 56
17. Lahore	187,404	431	32 68	236,206	209	40 60	183,599	162	39 61	3,663	31	39 61	188,123	164	14 53
18. Amritsar	406,351	437	31 66	288,434	310	40 60	109,381	118	31 67	21,811	21	41 59	103,557	111	15 55
19. Gujranwala	315,408	406	33 67	169,661	278	37 63	66,357	106	31 66	18,782	30	33 67	62,573	100	41 59
20. Sheikhupura	307,612	588	33 67	102,557	196	38 62	46,121	88	37 63	12,369	24	37 63	51,116	104	15 55
2. HIMALAYAN	1,415,088	514	46 54	151,849	88	47 53	57,782	33	50 50	24,517	14	48 52	88,585	51	63 37
21. Nahan State	118,513	844	63 37	10,247	73	55 15	2,911	21	51 16	1,291	9	40 60	6,116	3	68 42
22. Simla	19,500	432	50 50	6,566	145	70 30	6,771	119	72 28	1,532	31	8 12	10,871	210	70 30
23. Simla Hill States	271,226	591	41 59	11,495	47	30 60	6,848	22	30 60	2,132	8	12 58	8,507	29	63 37
24. Bilaspur State	78,725	803	38 62	11,647	119	11 56	2,404	25	18 52	889	9	18 52	4,311	4	69 31
25. Kangra	590,320	771	40 60	89,471	117	13 57	30,550	10	13 57	11,722	19	18 52	10,699	53	51 16
26. Mandi State	158,798	858	62 38	11,217	61	19 51	2,832	15	59 11	1,167	8	16 54	10,731	58	86 14
27. Suket State	49,081	903	44 56	1,948	36	19 51	1,300	24	48 52	981	18	59 61	1,012	19	62 18
28. Chamba State	125,662	886	48 52	0,205	41	60 10	1,013	28	52 18	1,189	8	56 14	1,798	34	58 12
3. SUB-HIMALAYAN	3,261,262	559	32 68	1,303,050	223	36 64	516,398	88	34 66	150,146	27	34 66	602,013	103	44 56
29. Ambala	360,023	528	37 63	119,157	219	41 59	59,747	88	40 60	19,020	28	38 62	96,324	137	61 49
30. Kalua State	38,982	679	41 59	9,149	150	40 60	2,725	48	38 62	1,233	22	44 59	5,282	92	60 40
31. Hoshiarpur	560,592	605	36 64	216,599	231	37 63	51,114	55	39 61	2,139	27	31 66	73,645	79	41 59
32. Gurdaspur	468,702	530	32 68	195,059	229	37 63	76,687	90	32 68	22,575	26	36 64	99,287	105	10 60
33. Sialkot	154,122	184	31 69	266,919	285	31 66	90,061	96	31 69	20,131	31	32 68	97,287	104	39 61
34. Gujrat	462,252	561	29 71	181,563	224	34 66	90,196	100	33 67	19,558	24	3 66	67,177	42	38 62
35. Jhelum	254,230	541	29 71	103,335	217	32 68	52,511	110	28 72	11,061	29	33 64	48,898	103	38 62
36. Rawalpindi	348,259	612	30 70	82,428	115	42 58	47,235	83	38 62	12,686	22	37 63	78,616	138	56 14
37. Attock	310,100	605	30 70	95,841	187	36 64	46,059	90	30 70	12,131	24	36 64	48,115	91	39 61
4. NORTH-WEST DRY AREA—	3,476,952	572	81 69	1,014,539	167	35 65	595,520	98	33 67	110,598	18	33 67	880,065	145	43 57
38. Montgomery	416,208	583	30 70	116,758	163	33 67	53,990	76	31 66	13,288	19	32 68	113,372	159	43 57
39. Shahpur	390,284	512	31 69	125,822	175	35 65	69,405	96	33 67	11,088	26	33 64	120,319	167	39 61
40. Mianwali	218,443	610	29 71	52,133	146	35 65	40,938	114	30 70	5,896	16	31 69	40,795	111	40 54
41. Lyallpur	574,150	586	28 72	176,093	190	35 65	69,456	71	37 63	11,929	15	31 66	144,835	148	42 58
42. Jhang	270,981	491	32 68	113,534	252	36 64	68,925	120	28 72	13,619	21	31 69	61,500	113	43 57
43. Multan	461,162	518	33 67	161,864	182	35 65	96,705	109	35 65	19,625	22	36 61	150,908	169	43 57
44. Bahawalpur State	484,271	620	33 67	102,125	131	33 67	70,301	90	34 66	12,803	21	31 69	111,331	143	45 55
45. Muzaffargarh	348,197	612	32 68	77,624	137	36 64	62,160	110	32 68	7,948	11	31 66	72,249	127	41 59
46. D. G. Khan	304,256	614	34 66	58,286	118	42 58	63,310	127	31 69	8,402	17	40 60	61,556	124	45 55
CITIES	81,787	155	48 52	120,480	229	39 61	167,217	317	38 62	25,533	48	41 59	131,838	250	48 52
DELHI	138,664	234	31 69	151,506	310	40 60	105,548	216	46 54	16,839	35	39 61	75,631	155	58 42
Delhi City	23,136	76	21 79	112,063	371	40 60	88,031	291	47 53	13,900	46	38 62	65,730	216	59 41

(OCCUPATIONAL)—SUBSIDIARY TABLE IV.

Occupations combined with agriculture (where agriculture is the subsidiary occupation).

Occupation.	NUMBER <i>per mille</i> WHO ARE PARTIALLY AGRICULTURISTS.					
	Punjab.					Delhi.
	Province.	Indo-Gangetic Plain West	Himalayan.	Sub-Himalayan.	North-West Dry Area.	Indo-Gangetic Plain West
1	2	3	4	5	6	7
SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION	1	1	1	1	1	..
Agriculture .. .. .	..	..	..	..	..	..
Pasture	15	12	32	21	12	4
Fishing and Hunting	33	33	73	2	37	..
Others	31	12	96	27	16	..
SUB-CLASS II.—EXPLOITATION OF MINERALS	20	23	6	19	2	45
SUB-CLASS III.—INDUSTRY	42	44	156	37	23	11
Textile	34	40	127	32	16	19
Wood	73	91	189	61	24	18
Metal	77	81	227	61	34	20
Ceramics	32	31	169	24	24	8
Food	22	19	76	14	14	7
Dress and the toilet	63	54	205	44	27	15
Others	30	28	86	30	26	5
SUB-CLASS IV.—TRANSPORT	28	23	78	33	20	1
SUB-CLASS V.—TRADE	41	43	89	35	35	4
Banks, etc.	110	104	136	109	161	31
Textiles	27	26	96	23	21	..
Foodstuffs	39	41	95	30	32	7
Shopkeepers (unspecified)	32	22	44	21	35	3
Others	30	30	51	24	39	1
SUB-CLASS VI.—PUBLIC FORCE	60	59	108	53	55	18
SUB-CLASS VII.—PUBLIC ADMINISTRATION	48	51	117	51	34	23
SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS	57	55	163	46	41	107
Religion	68	69	182	56	43	33
Others	40	36	131	31	37	6
SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME	118	112	203	121	52	2
SUB-CLASS X.—DOMESTIC SERVICE	25	26	52	27	14	6
Cooks and water-carriers, etc.	25	27	51	27	14	6
Others	25	20	67	29	21	8
SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS	14	11	42	24	10	..
Labourers and workmen (unspecified)	13	9	44	25	10	..
Others	22	22	35	18	23	2
SUB-CLASS XII.—UNPRODUCTIVE	22	27	42	33	9	12
Beggars, vagrants and procurers, etc.	23	28	43	33	10	13
Others	1	..	..	4	..	..

(OCCUPATIONAL)—SUBSIDIARY TABLE V.

Occupations combined with agriculture (where agriculture is the principal occupation).

LANDLORDS (RENT-RECEIVERS).		CULTIVATORS (RENT-PAYERS).		FARM SERVANTS AND FIELD LABOURERS.	
Subsidiary occupation.	No. per 10,000 who follow it.	Subsidiary Occupation.	No. per 10,000 who follow it.	Subsidiary Occupation.	No. per 10,000 who follow it.
1	2	3	4	5	6
PUNJAB.					
TOTAL	1,680	TOTAL	681	TOTAL	613
Rent-payers	244	Rent-receivers	84	Rent-receivers	40
Agricultural labourers	71	Agricultural labourers	22	Rent-payers	55
Government employees of all kinds	165	General labourers	29	General labourers	79
Money-lenders and grain-dealers	79	Government employees of all kinds	51	Village watchmen	10
Other traders of all kinds	148	Money-lenders and grain-dealers	13	Cattle-breeders and milkmen	15
Priests	76	Other traders of all kinds	27	Mill hands	3
Clerks of all kinds (not Government)	10	Fishermen and boatmen	1	Fishermen and boatmen	1
School masters	22	Cattle-breeders and milkmen	12	Rice-pounders	1
Lawyers	6	Village watchmen	6	Shopkeepers and Pedlars	11
Estate agents and managers	5	Weavers	17	Oil-pressers	5
Medical practitioners	8	Barbers	11	Weavers	49
Artisans	101	Oil-pressers	6	Potters	3
Others	745	Washermen	2	Leather workers	71
		Potters	9	Washermen	2
		Blacksmiths and carpenters	41	Blacksmiths and carpenters	11
		Others	35	Others	251
DELHI.					
TOTAL	3,645	TOTAL	969	TOTAL	1,094
Rent-payers	250	Rent-receivers	91	Rent-receivers	6
Agricultural labourers	10	Agricultural labourers	38	Rent-payers	136
Government employees of all kinds	1,546	General labourers	69	General labourers	29
Money-lenders and grain-dealers	72	Government employees of all kinds	191	Village watchmen	10
Other traders of all kinds	82	Money lenders and grain-dealers	18	Cattle-breeders and milkmen	6
Priests	164	Other traders of all kinds	17	Mill hands	2
Clerks of all kinds (not Government)	..	Fishermen and boatmen	..	Fishermen and boatmen	..
School masters	10	Cattle breeders and milkmen	71	Rice pounders	..
Lawyers	..	Village watchmen	6	Shopkeepers and pedlars	2
Estate agents and managers	..	Weavers	3	Oil-pressers	..
Medical practitioners	..	Barbers	6	Weavers	422
Artisans	..	Oil-pressers	..	Potters	21
Others	1,505	Washermen	+	Leather workers	355
		Potters	..	Washermen	..
		Blacksmiths and carpenters	16	Blacksmiths and carpenters	24
		Others	443	Others	97

(OCCUPATIONAL)—SUBSIDIARY TABLE VI.

Occupations of females by sub-classes and selected orders and groups.

Group.	Occupation.	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males.	Group.	Occupation.	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males.
		Males.	Females.				Males.	Females.	
1	PUNJAB.				1	ORDER 10.—CERAMICS	116,163	12,180	105
	SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION.	4,830,170	483,689	100		52 Makers of glass and crystal ware ..	70	10	132
	ORDER 1.—PASTURE AND AGRICULTURE.	4,825,648	483,429	100		53 Makers of glass bangles, glass beads, and necklaces and glass ear studs, etc.	1,275	281	220
	(a) <i>Ordinary cultivation</i> ..	1,602,029	472,525	103		56 Brick and tile makers ..	28,491	3,452	121
1	Income from rent of land ..	266,320	71,459	208		ORDER 12.—FOOD INDUSTRIES	52,805	86,181	684
5	Field labourers ..	229,481	27,539	120		65 Rice pounders and huskers and flour grinders.	10,360	24,406	2,356
	(b) <i>Growers of special products and market gardening.</i>	12,471	1,312	105		66 Bakers and biscuit makers ..	6,582	2,690	409
6	Tea, coffee, cinchona, rubber and indigo plantations.	2,278	738	321		67 Grain parchers, etc. ..	6,504	7,970	1,225
	(c) <i>Forestry</i> ..	9,315	1,271	136		ORDER 13.—INDUSTRIES OF DRESS AND THE TOILET.	397,298	43,905	111
9	Woodcutters, firewood, catechu, rubber, etc., collectors and charcoal burners.	7,510	1,190	158		76 Hat, cap and turban makers ..	108	113	1,046
	(e) <i>Raising of small animals</i> ..	29	3	703		77 Tailors, milliners, dressmakers, darters, and embroiderers on linen.	48,458	11,160	270
15	Birds, bees, etc. ..	7	3	429		80 Washing, cleaning and dyeing ..	58,417	7,171	123
	SUB-CLASS II.—EXPLOITATION OF MINERALS.	8,531	1,059	124		ORDER 14.—FURNITURE INDUSTRIES	1,406	145	108
	ORDER 3.—MINES	1,111	47	42		83 Cabinet makers, carriage painters, etc.	1,118	143	128
21	Mines and metallic minerals (gold, iron, manganese, etc.).	4	3	750		ORDER 15.—BUILDING INDUSTRIES	57,575	4,685	81
22	ORDER 4.—QUARRIES OF HARD ROCKS, OTHER MINERALS (JADE, DIAMONDS, LIMESTONE, ETC.).	3,565	396	111		85 Lime burners, cement workers ..	684	148	210
	ORDER 5.—SALT, ETC.	3,855	616	160		87 Stone cutters and dressers ..	383	177	462
23	Rock, sea and marsh salt ..	688	184	267		89 Builders (other than buildings made of bamboo or similar materials), painters, decorators of houses, tilers, plumbers, etc.	19,387	2,550	132
24	Extraction of saltpetre, alum, and other substances soluble in water.	3,167	132	136		ORDER 18.—OTHER MISCELLANEOUS AND UNDEFINED INDUSTRIES.	229,420	114,391	496
	SUB-CLASS III.—INDUSTRY	1,448,432	344,730	238		100 Toy, kite, cage, fishing tackle, etc. makers, taxidermists, etc.	3,135	661	211
	ORDER 6.—TEXTILES	283,078	117,180	414		101 Others, including managers, persons (other than performers) employed in theatres and other places of public entertainments, employees of public societies, race course service, huntsmen, etc.	684	210	307
25	Cotton ginning, cleaning and pressing	27,708	3,207	116		102 Contractors for the disposal of refuse, dust, etc.	466	402	865
26	Cotton spinning ..	5,890	57,049	9,686		103 Sweepers, scavengers, etc. ..	168,442	112,342	667
27	Cotton sizing and weaving ..	230,109	51,470	221		SUB-CLASS IV.—TRANSPORT	179,261	4,486	25
28	Jute spinning, pressing and weaving	376	120	319		ORDER 20.—TRANSPORT BY WATER	19,995	830	42
29	Rope, twine and string ..	11,093	3,283	296		109 Labourers employed on the construction and maintenance of streams, rivers and canals.	2,541	307	121
31	Wool carding and spinning ..	271	337	1,244		SUB-CLASS V.—TRADE	550,294	33,134	60
34	Silk spinners ..	901	184	204		ORDER 28.—TRADE IN WOOD	6,345	867	137
35	Silk weavers ..	518	84	162		125 Trade in wood (not firewood) cork, bark, bamboo thatch, etc.	6,345	867	137
37	Dyeing, bleaching, printing preparation and sponging of textiles.	2,273	440	191		ORDER 29.—TRADE IN METALS	1,191	544	457
38	Lace, crepe, embroideries, fringes, etc., and insufficiently described textile industries.	482	779	1,616		126 Trade in metals, machinery, knives, tools, etc.	297,959	19,984	67
	ORDER 7.—HIDES, SKINS AND HARD MATERIALS FROM THE ANIMAL KINGDOM.	20,239	2,659	131		ORDER 33.—OTHER TRADE IN FOOD STUFFS.	11,170	1,796	161
39	Tanners, curriers, leather dressers and leather dyers, etc.	14,627	2,305	158		133 Sellers of milk, butter, ghee, poultry, eggs, etc.	24,700	8,637	350
	ORDER 8.—WOOD	168,293	7,597	46		135 Cardamom, betel-leaf, vegetables, fruit and arecanut sellers	5,836	2,671	455
45	Basket makers and other industries of wooden material including leaves and the thatchers and building working with bamboo or reeds or similar materials.	26,617	5,306	199		139 Dealers in hay, grass and fodder ..	4,448	226	51
						ORDER 35.—TRADE IN FURNITURE.	1,779	190	107
						141 Trade in furniture, carpets, curtains and bedding.			

(OCCUPATIONAL).—SUBSIDIARY TABLE VI.

Occupations of females by sub-classes and selected orders and groups *contd.*

Group.	Occupation.	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males.	Group.	Occupation.	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males.
		Males.	Females.				Males.	Females.	
1	2	3	4	5	1	2	3	4	5
	ORDER 36.—TRADE IN BUILDING MATERIALS.					SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME.			
143	Trade in building materials other than bricks, tiles and wooden materials.	431	81	188		ORDER 51.—PERSONS LIVING PRINCIPALLY ON THEIR INCOME.	19,260	4,638	241
	ORDER 38.—TRADE IN FUEL				180	Proprietors (other than of agricultural land) fund and scholarship-holders and pensioners.			
147	Dealers in firewood, charcoal, coal, cowdung, etc.	2,073	444	214		SUB-CLASS X.—DOMESTIC SERVICE (ORDER 52).	226,236	52,619	233
	ORDER 39.—TRADE IN ARTICLES OF LUXURY AND THOSE PERTAINING TO LETTERS, AND THE ARTS AND SCIENCES.	5,754	959	167		181 Cooks, water carriers, doorknockers, watchmen and other in-door servants.	207,806	52,619	253
149	Dealers in common bangles, beads, necklaces, fans, small articles, toys, hunting and fishing tackle, flowers, etc.	1,621	94	203		SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS.	197,404	41,984	213
	SUB-CLASS VII.—PUBLIC ADMINISTRATION.	55,936	877	16		ORDER 53.—(GENERAL TERMS WHICH DO NOT INDICATE A DEFINITE OCCUPATION.	179,337	41,235	230
	SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS.	174,739	25,208	144		187 Labourers and workmen otherwise unspecified.			
	ORDER 46.—RELIGION	105,492	14,219	135		SUB-CLASS XII.—UNPRODUCTIVE.	22,187	42,853	193
105	Priests, ministers, etc.	93,492	12,621	135		ORDER 55.—BEGGARS, VAGRANTS, PROSTITUTES.	208,896	42,633	204
167	Catechists, readers, church and mission service	2,460	250	104		189 Beggars, vagrants, witches, wizards, etc.	208,784	41,631	199
168	Temple, burial or burning ground service, pilgrim conductors, circumcisers,	7,520	1,241	165		A Do. (professional beggars) ..	207,155	41,346	200
	ORDER 48.—MEDICINE	12,137	5,471	451		B Do. (others)	1,629	285	175
172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	3,366	5,103	1,516		190 Procurers and prostitutes	112	1,002	8,946
	ORDER 50.—LETTERS AND ARTS AND SCIENCES.	31,772	3,583	113		191 ORDER 56.—OTHER UNCLASSIFIED NON-PRODUCTIVE INDUSTRIES.	4	2	500
178	Music composers and masters, players of all kinds of musical instruments (not military), singers, actors, dancers.	21,364	3,284	154					

(OCCUPATIONAL)—SUBSIDIARY TABLE VI.

Occupations of females by sub-classes and selected orders and groups—concluded.

Group.	Occupation.	ACTUAL WORKERS.			Group.	Occupation.	ACTUAL WORKERS.		
		Males.	Females.	Number of females per 1,000 males.			Males.	Females.	Number of females per 1,000 males.
1	DELHI.	3	4	5	1		3	4	5
	SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION.	40,864	3,275	80		SUB-CLASS V.—TRADE	32,289	1,200	37
	ORDER 1.—PASTURE AND AGRICULTURE.	40,711	3,272	80		ORDER 33.—OTHER TRADE IN FOOD STUFFS.	11,002	668	61
	(a) Ordinary cultivation	38,012	3,012	79	135	Cardamom, betel leaf, vegetables, fruit, and arecanut sellers.	2,431	270	111
1	Income from rent of land	728	249	342	139	Dealers in hay, grass and fodder ..	170	131	771
4	Farm servants	881	114	129	147	ORDER 38.—TRADE IN FUEL. (Dealers in firewood, charcoal, coal, cowdung, etc.)	284	53	187
6	Field labourers	3,297	637	193		ORDER 39.—TRADE IN ARTICLES OF LUXURY AND THOSE PERTAINING TO LETTERS AND THE ARTS AND SCIENCES.	1,234	107	87
(c)	Forestry	279	100	358					
9	Woodcutters, firewood, catechu, rubber, etc., collectors and charcoal burners.	277	100	361					
	(d) Raising of farm stock	1,204	68	56	150	Publishers, booksellers, stationers, dealers in music, pictures, musical instruments and curiosities.	414	58	140
11	Cattle and buffalo breeders and keepers.	178	19	107					
	SUB-CLASS II.—EXPLOITATION OF MINERALS.	190	8	42		SUB-CLASS VII.—PUBLIC ADMINISTRATION.	4,878	32	7
	SUB-CLASS III.—INDUSTRY ..	50,583	10,570	209		SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS.	5,230	1,376	263
	ORDER 6.—TEXTILES	5,872	1,187	208		ORDER 46.—RELIGION	1,981	678	342
26	Cotton spinning	587	377	642		Priests, ministers, etc.	853	496	581
27	Cotton sizing and weaving	2,621	511	195	165	Catechists, readers, church and mission service.	29	5	172
32	Weaving of woollen blankets	3	28	9,333	167	Temple, burial or burning ground service, pilgrim conductors, circumcisers.	1,099	135	123
38	Lace, crepe, embroideries, fringers, etc., and insufficiently described textiles industries.	1,270	214	169		ORDER 48.—MEDICINE	984	339	345
	ORDER 7.—HIDES, SKINS AND HARD MATERIALS FROM THE ANIMAL KINGDOM.	2,393	271	113	172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	416	296	712
39	Tanners, curriers, leather dressers and leather dyers, etc.	1,703	259	152		ORDER 49.—INSTRUCTION ..	1,043	147	141
	ORDER 8.—WOOD	2,878	179	62	173	Professors and teachers of all kinds	747	133	178
45	Basket makers and other industries of wooden material including leaves and thatchers, and building working with bamboo and reeds, and similar materials.	557	134	241		ORDER 50.—LETTERS AND ARTS AND SCIENCES.	893	212	237
	ORDER 10.—CERAMICS	3,557	657	185	178	Music composers and masters, players on all kinds of musical instruments (not military) singers, actors, and dancers.	531	206	388
55	Potters and earthen pipe and bowl makers.	1,774	195	110	179	Conjurors, acrobats, fortune-tellers, reciters, exhibitors of curiosities and wild animals.	34	5	147
56	Brick and tile makers	1,586	462	291					
	ORDER 12.—FOOD INDUSTRIES ..	2,463	414	168		SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME.	11,990	1,709	143
65	Rice pounders and huskers and flour grinders.	428	370	864		ORDER 51.—PERSONS LIVING PRINCIPALLY ON THEIR INCOME			
67	Grain purchasers, etc.	139	28	201	180	Proprietors (other than of agricultural land) fund and scholarship-holders and pensioners.	1,212	723	597
	ORDER 13.—INDUSTRIES OF DRESS AND THE TOILET.	10,278	3,354	326					
77	Tailors, milliners, dress makers, darters, and embroiderers on linen.	1,248	393	315					
78	Shoe, boot and sandal makers ..	4,679	2,251	481		SUB-CLASS X.—DOMESTIC SERVICE (ORDER 52).	9,661	1,709	177
80	Washing, cleaning and dyeing ..	1,877	393	209	181	Cooks, water carriers, doorkeepers, watchmen and other indoor servants.	10,380	2,648	256
81	Barbers, hairdressers, and wigmakers	1,780	303	170					
	ORDER 15.—BUILDING INDUSTRIES	7,168	1,600	223		SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS			
86	Excavators and well sinkers ..	4	7	1,750		(ORDER 53.—GENERAL TERMS WHICH DO NOT INDICATE A DEFINITE OCCUPATION.)			
89	Builders (other than buildings made of bamboo or similar materials), painters, decorators of houses, tilers, plumbers, etc.	1,723	1,508	875	187	Labourers and workmen otherwise unspecified.	8,193	2,613	319
	ORDER 18.—OTHER MISCELLANEOUS AND UNDEFINED INDUSTRIES.	9,380	2,831	302		SUB-CLASS XII.—UNPRODUCTIVE.	2,060	588	285
103	Sweepers and scavengers, etc. ..	4,778	2,737	573		ORDER 55.—BEGGARS, VAGRANTS, PROSTITUTES.	2,018	588	291
	SUB-CLASS IV.—TRANSPORT ..	14,516	178	12	189	Beggars, vagrants, witches, wizards, etc.	2,018	426	211
	ORDER 21.—TRANSPORT BY ROAD ..	5,929	133	22		Do. (professional beggars) ..	1,723	411	239
112	Labourers employed on roads and bridges.	16	6	375	A				
113	Owners, managers and employees (excluding personal servants) connected with mechanically driven vehicles (including trams)	86	8	93					

(OCCUPATIONAL)—SUBSIDIARY TABLE VII.

Selected occupations 1921, 1911 and 1901.

Group No.	OCCUPATION.	PUNJAB.	DELHI.	PUNJAB AND DELHI.			Percent- age of variation 1911—1921
		Population supported in 1921.	Population supported in 1921.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	
	1	2	3	4	5	6	7
	CLASS A.—PRODUCTION OF RAW MATERIALS.	15,213,502	143,050	15,356,552	14,538,276	14,169,329	+5.6
	SUB-CLASS I.—EXPLOITATION OF ANIMALS AND VEGETATION.	15,191,205	142,310	15,333,515	14,502,144	14,152,642	+5.7
	ORDER 1.—PASTURE AND AGRICULTURE	15,176,953	141,702	15,318,655	14,189,815	14,112,156	+5.7
	(a) Ordinary Cultivation	14,775,303	135,493	14,910,790	14,016,144	13,887,950	+6.4
1	Income from rent of land	1,008,172	4,764	1,012,936	625,869	8,915,089	+61.8
2	Ordinary cultivators	12,619,613	118,486	12,738,099	12,188,142	4,537,431	+4.5
3	Agents, managers of landed estates (not planters), clerks, rent-collectors,	13,579	23	13,602	9,946	1,197	+36.8
4	Farm servants	506,252	2,589	508,841	1,192,187	433,653	-3.9
5	Field labourers	627,687	9,031	637,318			
	(b) Growers of special products and market gardening	28,938	3,171	32,109	20,332	23,649	+54.1
6	Tea, coffee, cinchona, rubber, indigo plantations	4,130	..	4,130	711	6,273	+480.9
7	Fruit, flower, vegetable, betel, vine, arcanut, etc. growers.	24,808	3,171	27,979	20,121	17,376	+39.1
	(c) Forestry	22,513	643	23,156	46,081	20,832	-49.7
9	Wood cutters, firewood, catechu, rubber, etc. collectors and charcoal burners,	18,297	639	18,936	40,598	15,315	-53.3
10	Lac collectors	4	..	4			
	(d) Raising of Farm stock	350,158	2,395	352,553	104,766	209,723	-13.3
11	Cattle, buffalo breeders and keepers	75,021	387	75,408	39,444	19,322	+91.2
12	Sheep, goat and pig breeders	12,333	179	12,512	6,328	22,853	+97.7
13	Breeders of other animals (horses, mules, camels, asses, etc.)	1,883	..	1,883	2,096	7,525	-10.2
14	Herdsmen, shepherds, goat-herds, etc.	260,921	1,829	262,750	358,898	160,023	-26.8
	ORDER 2.—FISHING AND HUNTING	14,252	608	14,860	12,299	10,486	+20.8
17	Fishing	12,078	358	12,436	10,162	7,326	+22.4
18	Hunting	2,174	250	2,424	2,137	3,160	+13.4
	SUB-CLASS II.—EXPLOITATION OF MINERALS.	22,297	740	23,037	36,132	16,687	-36.2
	ORDER 3.—MINES	2,801	7	2,808	3,715	2,422	-24.4
19	Coal Mines	2,779	7	2,786	3,489	2,408	-20.1
22	ORDER 4.—QUARRIES OF HARD ROCKS—(Other minerals, jade, diamonds, limestone, etc.).	8,597	336	8,933	16,119	8,493	-44.6
	ORDER 5.—SALT, ETC.	10,899	397	11,296	16,298	5,772	-30.7
23	Rock, sea and marsh salt	2,383	..	2,383	4,752	54	-49.9
24	Extraction of salt-petre, alum and other substances soluble in water.	8,516	397	8,913	11,546	5,718	-22.8
	CLASS B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES.	7,044,818	256,314	7,300,932	7,179,758	7,200,110	+1.7
	SUB-CLASS III.—INDUSTRY	4,834,248	150,766	4,985,014	4,915,027	5,145,087	+1.4
	ORDER 6.—TEXTILES	1,015,603	17,470	1,033,073	1,087,888	1,304,021	-5
25	Cotton ginning, cleaning and pressing	91,886	1,096	92,982	89,743	139,301	+3.6
26	Cotton spinning	108,201	2,959	111,160	883,156	959,688	-1
27	Cotton sizing and weaving	756,001	7,584	763,585			
28	Jute spinning, pressing and weaving	1,108	139	1,307	1,449	1	-9.8
29	Rope, twine and string	31,589	329	31,898	8,349	23,979	+282.1
30	Other fibres (coconut, aloes, flax, hemp, straw, etc.).	700	..	700	32,223	1,232	-97.8
31	Wool, carding and spinning	897	1	898	17,023	32,361	-36.4
32	Weaving of woollen blankets	9,190	145	9,335			
33	Weaving of woollen carpets	465	127	592	13,584	16,885	-62
34	Silk spinners	2,968	402	3,370			
35	Silk weavers	1,782	14	1,796	18,786	91,949	-56.2
37	Dyeing, bleaching, printing, preparation and sponging of textiles.	7,761	470	8,231			
38	Lace, crepe, embroideries, fringes and insufficiently describ- ed textile industries.	3,014	4,204	7,218	23,575	38,628	-69.4
	ORDER 7.—HIDES, SKINS, AND HARD MATERIALS FROM THE ANIMAL KINGDOM.	67,724	5,657	73,381	91,967	318,763	-20.2
39	Tanners, curriers, leather dressers and leather dyers, etc.	53,041	3,354	56,395	77,284	312,250	-27
40	Makers of leather articles such as trunks, water bags, sad- dlery or harness, etc.	14,238	1,491	15,729	13,891	4,996	+13.2
41	Furriers and persons occupied with feathers and bristles, brush makers.	39	567	606	601	1,003	+8
42	Bone, ivory, horn, shell, etc., workers (except buttons)	406	245	651	191	514	+240.8

(OCCUPATIONAL)—SUBSIDIARY TABLE VII.

Selected occupations 1921, 1911 and 1901—continued.

Group No.	OCCUPATION.	PUNJAB.	DELHI.	PUNJAB AND DELHI.			Percentage of variation 1911—1921
		Population supported in 1921.	Population supported in 1921.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	
	1	2	3	4	5	6	7
43	ORDER 8.—WOOD	508,258	6,935	515,193	484,749	374,926	+6.3
44	Sawyers	12,686	86	12,772	380,649	275,420	+11.9
45	Carpenters, turners and joiners	407,267	5,819	413,086	104,100	99,506	-14.2
	Basket makers, and other industries of woody material including leaves and thatchens and builders working with bamboo, reeds or other similar materials	88,305	1,030	89,335			
46	ORDER 9.—METALS	239,156	9,814	248,970	240,096	326,525	+3.7
47	Forging and rolling of iron and other metals	1,971	532	2,503	937	1,806	+167.1
48	Makers of arms, guns, etc.	252	151	403	115	884	+250.4
49	Other workers in iron and makers of implements and tools principally or exclusively of iron.	211,486	5,042	217,428	217,927	298,775	-2
50	Workers in brass, copper and bell metal	24,195	2,541	26,736	18,943	19,577	+41.1
51	ORDER 10.—CERAMICS	369,595	10,104	379,699	352,704	309,831	+7.7
52	Makers of glass and crystal ware	172	297	469			
53	Makers of glass bangles, glass beads and necklaces and glass ear-studs, etc.	3,236		3,236	3,079	7,653	+20.3
54	Potters and earthen pipe and bowl makers	203,443	6,213	209,656	284,496	270,043	+5.3
55	Brick and tile makers	71,658	3,452	75,110	64,788	31,838	+15.9
	ORDER 11.—CHEMICAL PRODUCTS PROPERLY SO-CALLED, AND ANALOGOUS	155,809	4,625	160,434	128,225	127,063	+25.1
56	Manufacture of dyes, paint and ink	355	16	371	644	2,215	-42.4
57	Manufacture and refining of vegetable oils	147,117	2,633	149,750	120,650	114,798	+24.3
58	Manufacture and refining of mineral oils	158		158			
	ORDER 12.—FOOD INDUSTRIES	215,033	7,140	222,173	289,684	335,091	-23.2
59	Rice pounders and huskers and flour-grinders	69,877	1,496	71,373	113,318	173,458	-37
60	Bakers and biscuit makers	24,128	886	25,014	38,728	38,830	-35.4
61	Grain parchers, etc.	31,299	388	31,687	35,682	53,358	-11.2
62	Butchers	41,701	1,195	42,896	46,456	39,996	-7.7
63	Makers of sugar, molasses and gur	2,995	121	3,116	1,964	3,254	+58.7
64	Sweetmeat makers, preparers of jam and condiments, etc.	42,004	2,534	44,538	51,796	22,411	-14
65	Brewers and distillers	1,944	238	2,182	246	1,765	+78.7
	ORDER 13.—INDUSTRIES OF DRESS AND THE TOILET	1,276,750	39,145	1,315,895	1,147,862	961,789	+14.6
66	Tailors, milliners, dress makers, darners and embroiderers on linen.	155,789	6,769	162,558	151,966	108,963	+7
67	Shoe, boot and sandal makers	653,893	18,981	672,874	540,490	440,253	+24.5
68	Washing, cleaning and dyeing	186,242	5,575	191,815	177,671	126,146	+8
69	Barbers, hair dressers and wig makers	276,095	5,833	281,928	271,061	282,158	+4
70	ORDER 14.—FURNITURE INDUSTRIES	4,611	924	5,535	8,759	3,026	-36.5
71	Cabinet makers, carriage painters, etc.	3,834	902	4,736	8,724	2,251	-45.7
72	Upholsterers, tent makers, etc.	807	22	829	35	775	+2,268.6
73	ORDER 15.—BUILDING INDUSTRIES	159,261	18,207	177,468	272,168	132,357	-34.3
74	Lime burners, cement workers	2,088	469	2,557	1,805	3,337	+41.7
75	Excavators and well sinkers	3,734	75	3,809	6,604	5,331	-42.3
76	Stone cutters and dressers	1,494	179	1,673			
77	Brick layers and masons	96,974	11,753	108,727	164,031	106,989	-32.7
78	Builders (other than buildings made of bamboo or similar materials) painters, decorators of houses, tilers, plumbers, etc.	54,971	5,731	60,702	99,728	16,700	-39.1
	ORDER 16.—CONSTRUCTION OF MEANS OF TRANSPORT	1,184	366	1,550	1,734	2,843	-10.6
79	Persons engaged in making, assembling or repairing motor vehicles, cycles.	96	203	299			
80	Carriage, cart, paliki, etc. makers and wheelwrights	959	121	1,080	1,684	2,620	-18.1
81	Ship, boat aeroplane builders	129	42	171	50	223	+24.2
82	ORDER 17.—PRODUCTION AND TRANSMISSION OF PHYSICAL FORCES (HEAT, LIGHT, ELECTRICITY MOTIVE POWERS, ETC.) (Gas workers and electric light power).	1,659	1,490	3,149	1,610	890	+95.6
	ORDER 18.—OTHER MISCELLANEOUS AND UNDEFINED INDUSTRIES.	819,575	28,589	848,164	807,581	944,960	+5
83	Printers, lithographers, engravers, etc.	3,928	714	4,642	4,869	5,873	-4.7
84	Makers of musical instruments	89	108	197	365	1,102	-46
85	Makers of watches and clocks and optical, photographic, mathematical and surgical instruments.	1,596	335	1,931	1,784	734	+8.2
86	Workers in precious stones and metals, enamellers, imitation jewellery makers, gilders, etc.	175,690	8,252	183,942	190,892	135,240	-3.6
87	Makers of bangles, or beads or necklaces of other materials than glass and makers of spangles, rosaries, lingams and sacred threads.	1,491	988	2,479	8,919	3,560	-72.2
88	Contractors for the disposal of refuse, dust, etc.	1,873	9	1,882			
89	Sweepers, scavengers, etc.	621,573	15,073	636,646	591,270	786,602	+7.7

(OCCUPATIONAL)—SUBSIDIARY TABLE VII.

Selected occupations 1921, 1911 and 1901—continued.

Group No.	OCCUPATION.	PUNJAB.	DELHI.	PUNJAB AND DELHI.			Percentage of variation 1911—1921.
		Population supported in 1921.	Population supported in 1921.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	
	1	2	3	4	5	6	7
	SUB-CLASS IV.—TRANSPORT	487,660	29,928	517,588	709,130	455,809	-27.0
107	ORDER 20.—TRANSPORT BY WATER.. ..	57,348	888	58,236	108,140	55,553	-46.1
	Ship owners and their employees, ship brokers, ship's officers, engineers, mariners and firemen.	239	..	239	491	510	-61.3
108	Persons (other than labourers) employed on the maintenance of streams, harbours, docks, rivers and canals (including construction).	30,047	618	30,665	86,101	31,703	-56.6
109	Labourers employed on the construction and maintenance of streams, harbours, docks, rivers and canals.	6,444	225	6,669			
110	Boat owners, boatmen and towmen	20,647	45	20,692	21,148	21,650	-2.2
	ORDER 21.—TRANSPORT BY ROAD	246,506	13,298	259,804	427,750	288,481	-39.3
111	Persons (other than labourers) employed on the construction and maintenance of roads and bridges.	2,609	88	2,697	41,347	22,938	-77.6
112	Labourers employed on roads and bridges	6,521	59	6,580			
113	Owners, managers and employees (excluding personal servants) connected with mechanically driven vehicles (including trams).	4	160	164	58,919	42,211	-35.2
114	Owners, managers and employees (excluding personal servants) connected with other vehicles	31,960	6,042	38,002			
115	Palki, etc., bearers and owners	1,492	1,881	3,372	2,231	2,044	+51.1
116	Pack, elephant, camel, mule, ass and bullock owners and drivers.	158,519	2,953	161,472	213,618	203,228	-24.4
117	Porters and messengers	45,401	2,115	47,516	111,635	18,063	-57.4
	ORDER 22.—TRANSPORT BY RAIL	161,827	13,827	175,654	119,153	92,819	+17.5
118	Railway employees of all kinds other than coolies	126,384	8,222	134,606			
119	Labourers employed on railway construction and maintenance and coolies and porters employed on railway premises.	35,443	5,002	40,445	119,453	92,819	+17.5
120	ORDER 23.—POST OFFICE, TELEGRAPH AND TELEPHONE SERVICES.	21,656	1,916	23,572	23,787	18,953	-9.9
	SUB-CLASS V.—TRADE	1,722,710	75,622	1,798,332	1,555,601	1,599,214	+15.6
121	ORDER 24.—BANKS, ESTABLISHMENTS OF CREDIT, EXCHANGE AND INSURANCE (BANK MANAGERS, MONEY-LENDERS, EXCHANGE AND INSURANCE AGENTS, MONEY CHANGERS AND BROKERS AND THEIR EMPLOYEES.)	161,186	5,611	166,796	193,890	149,501	-13.9
122	ORDER 25.—BROKERAGE, COMMISSION AND EXPORT (BROKERS, COMMISSION AGENTS, COMMERCIAL TRAVELLERS, WAREHOUSE OWNERS AND EMPLOYEES).	30,759	1,160	32,519	26,282	16,917	+23.7
123	ORDER 26.—TRADE IN TEXTILES—(Trade in piece-goods, wool, cotton, silk, hair and other textiles).	130,020	12,312	142,332	113,960	58,773	+125.7
124	ORDER 27.—TRADE IN SKINS, LEATHER AND FURS—(Trade in skins, leather, furs, feathers, horn, etc. and articles made from these).	26,280	749	27,029	29,162	6,182	-9.2
125	ORDER 28.—TRADE IN WOOD—(Trade in wood (not fire-wood) cork, bark, bamboo, thatch, etc. and articles made from these).	20,160	917	21,077	17,127	13,251	+20.9
126	ORDER 29.—TRADE IN METALS—(Trade in metals, machinery, knives, tools, etc).	1,565	610	5,205	5,918	186	-12
128	ORDER 31.—TRADE IN CHEMICAL PRODUCTS—(Trade in chemical products (drugs, dyes, paints, petroleum, explosive, etc).	26,593	2,145	28,738	42,420	11,610	-32.3
	ORDER 32.—HOTELS, CAFES AND RESTAURANTS ETC. ..	10,195	810	11,005	5,474	12,057	+16.2
129	Vendors of wine, liquors, aerated water and ice, etc. ..	7,928	627	8,555	7,288	3,940	+17.4
130	Owners and managers of hotels, cookshops, sarais, etc., and their employees.	2,267	183	2,450	2,186	8,117	+12.1
	ORDER 33.—OTHER TRADE IN FOOD STUFFS	916,228	28,250	944,178	277,996	717,111	+239.7
131	Fish dealers	1,476	16	1,492	650	3,366	+127.4
132	Grocers and sellers of vegetable oil, salt and other condiments.	675,477	13,831	689,311	5,248	55,364	+13,031.7
133	Sellers of milk, butter, ghee, poultry, eggs, etc. ..	34,816	2,728	37,544	45,529	51,489	-17.5
134	Sellers of sweetmeats, sugar, gur and molasses	7,939	1,216	9,155	11,695	34,314	-21.7
135	Cardamom, betel leaf, vegetables, fruit and arecanut sellers	86,432	6,702	93,134	91,240	162,389	+2.1
136	Grain and pulse dealers	69,351	2,137	71,488	90,807	322,893	-21.3
137	Tobacco, opium, ganja, etc., sellers	7,580	761	8,341	7,647	10,006	+9.1
138	Dealers in sheep, goats, pigs	15,621	38	15,659	9,006	35,048	+73.9
139	Dealers in hay, grass, fodder	17,536	818	18,354	16,108	42,842	+13.6
140	ORDER 34.—TRADE IN CLOTHING AND THE TOILET ARTICLES Trade in ready-made clothing and other articles of dress and the toilet (hats, umbrellas, socks, ready-made shoes, perfumes, etc.).	23,864	7,679	31,543	34,969	25,964	+9.8

(OCCUPATIONAL)—SUBSIDIARY TABLE VII.

Selected occupations 1921, 1911 and 1901—continued.

Group No.	OCCUPATION.	PUNJAB.	DELHI.	PUNJAB AND DELHI.			Percentage of variation 1911—1921.
		Population supported in 1921.	Population supported in 1921.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	
	1	2	3	4	5	6	7
	ORDER 35.—TRADE IN FURNITURE	12,601	1,245	13,846	8,627	14,271	+60.6
141	Trade in furniture, carpets, curtains, and bedding	5,093	256	5,349	3,230	1,034	+65.6
142	Hardware, cooking utensils, porcelain, crockery, glassware, bottles, articles of gardening, etc.	7,508	989	8,497	5,397	13,237	+57.4
	ORDER 37.—TRADE IN MEANS OF TRANSPORT	65,658	1,272	66,930	47,397	31,767	+41.2
144	Dealers and hirers in mechanical transport, motors, cycles, etc.	516	110	626	47,397	31,767	+41.2
145	Dealers and hirers in other carriages, carts, boats, etc.	586	..	586	..	..	..
146	Dealers and hirers of elephants, camels, horses, cattle, asses, mules, etc.	64,556	1,162	65,718	..	..	..
	ORDER 38.—TRADE IN FUEL	6,468	820	7,288	23,603	9,965	-69.1
147	Dealers in firewood, charcoal, coal, cowdung, etc.	6,468	820	7,288	23,603	9,965	-69.1
	ORDER 39.—TRADE IN ARTICLES OF LUXURY AND THOSE PERTAINING TO LETTERS AND THE ARTS AND THE SCIENCES	18,037	3,315	21,352	28,702	33,271	-25.6
148	Dealers in precious stones, jewellery (real or imitation) clocks and optical instruments, etc.	1,035	762	1,797	9,890	16,309	-82
149	Dealers in common, bangles, bead necklaces, fans, small articles, toys, hunting and fishing tackle, flowers, etc.	14,635	1,489	16,124	15,985	11,150	+3.6
150	Publishers, book-sellers, stationers, dealers in music, pictures, musical instruments and curiosities.	2,367	1,064	3,431	2,827	5,812	+21.4
	ORDER 40.—TRADE OF OTHER SORTS	267,369	5,246	272,615	691,809	407,116	-60.6
151	Dealers in rags, stable refuse, etc.	570	21	591	157	..	+276.4
152	General store keepers and shopkeepers otherwise unspecified	254,126	3,407	257,533	676,945	370,331	-62
153	Itinerant traders, pedlars, hawkers, etc.	10,931	1,721	12,652	12,337	31,778	+12.6
154	Other traders (including farmers of pounds, tools and markets).	1,742	97	1,839	2,370	5,007	-22.4
	CLASS C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS.	958,411	25,141	983,552	1,039,403	1,037,334	-4.4
	SUB-CLASS VI.—PUBLIC FORCE	263,269	9,560	272,829	265,731	363,313	+2.7
155	ORDER 41.—ARMY	175,975	7,116	183,091	137,229	1,74,441	+33.4
156	Army (Imperial)	157,471	6,945	164,416	118,217	94,217	+39.1
156	Army (Indian States)	18,504	201	18,705	19,012	23,224	-1.6
	ORDER 44.—POLICE	86,977	2,411	89,388	128,502	245,831	-30.2
159	Police	60,975	2,244	63,219	67,324	84,471	-6.1
160	Watchmen	26,002	170	26,172	61,178	161,360	-57.2
	SUB-CLASS VII.—PUBLIC ADMINISTRATION	158,828	8,742	167,570	150,885	130,712	+11.1
	ORDER 45.— .. .. .	..	..	..	..	..	..
161	Service of the State	82,403	5,657	88,060	55,292	61,509	+59.3
162	Service of Indian or foreign State	30,712	16	30,728	24,681	8,222	+24.5
163	Municipal and other local (not village) service	15,974	2,282	18,256	22,250	28,421	-18
164	Village officials and servants other than watchmen	29,739	787	30,526	48,662	32,500	-37.3
	SUB-CLASS VIII.—PROFESSIONS AND LIBERAL ARTS.	536,314	16,839	553,153	622,787	543,809	-11.2
	ORDER 46.—RELIGION	326,034	7,478	333,512	342,553	347,396	-2.6
165	Priests, ministers, etc.	294,203	3,695	297,898	313,990	244,148	-5.1
166	Religious mendicants, inmates of monasteries, etc.	4,004	1,191	5,195	4,197	27,786	+23.8
167	Catechists, readers, church and mission service	6,220	74	6,294	4,010	31,433	+57
168	Temple, burial or burning ground service, pilgrims, conductors, circumcisers.	21,607	2,518	24,125	20,356	44,029	+18.5
	ORDER 47.—LAW	19,570	962	20,532	23,046	29,955	-10.9
169	Lawyers of all kinds including Kazis, law agents and mukhtars.	9,301	569	9,870	10,338	15,726	-4.5
170	Lawyers' clerks, petition-writers, etc.	10,269	393	10,662	12,708	14,229	-16.0
	ORDER 48.—MEDICINE	45,927	2,779	48,706	49,496	42,697	-1.6
171	Medical practitioners of all kinds including dentists, oculists and veterinary surgeons.	28,082	1,374	29,456	29,578	26,613	-4
172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	17,845	1,405	19,250	19,918	16,084	-3.4
	ORDER 49.—INSTRUCTION	55,267	3,163	58,432	40,131	27,915	+45.6
173	Professors and teachers of all kinds	52,206	2,140	54,346	40,131	27,915	+45.6
174	Clerks and servants connected with education	3,061	1,023	4,086	..	..	..
	ORDER 50.—LETTERS AND ARTS AND SCIENCES	39,516	2,455	41,971	167,561	85,346	-45.1
177	Authors, editors, journalists, artists, photographers, sculptors, astronomers, meteorologists, botanists, astrologers, etc.	4,827	191	5,018	8,864	18,643	-43.4
178	Music composers and masters, players on all kinds of musical instruments (not military), singers, actors and dancers.	61,060	1,491	62,557	128,071	46,582	-51.2
179	Conjurors, acrobats, fortune tellers, reciters, exhibitors of curiosities and wild animals.	15,405	106	15,511	19,941	17,769	-22.2

(OCCUPATIONAL)—SUBSIDIARY TABLE VII.

Selected occupations 1921, 1911 and 1901—concluded.

Group No.	OCCUPATION.	PENJAB.	DELHI.	PENJAB AND DELHI.		Percentage of variation 1911—1921.	
		Population supported in 1921.	Population supported in 1921.	Population supported in 1921.	Population supported in 1911.		
	1	2	3	4	5	6	7
	CLASS D.—MISCELLANEOUS	1,884,529	53,683	1,938,212	1,430,313	2,323,877	+25.5
180	SUB-CLASS IX.—PERSONS LIVING ON THEIR INCOME. ORDER 51.—PERSONS LIVING PRINCIPALLY ON THEIR INCOME— Proprietors (other than agricultural land) fund and scholarship-holders and pensioners.	63,915	4,376	68,291	53,971	63,977	+15.8
	SUB-CLASS X.—DOMESTIC SERVICE. ORDER (52)	639,103	23,688	662,791	507,727	594,872	+30.5
181	Cooks, water carriers, doorkeepers, watchmen and other indoor servants.	595,387	20,379	615,766	476,595	568,910	+29.2
182	Private grooms, coachmen, dog boys, etc.	42,283	3,199	45,482	31,222	26,862	+50.6
183	Private motor drivers and cleaners	1,433	110	1,543			
	SUB-CLASS XI.—INSUFFICIENTLY DESCRIBED OCCUPATIONS (ORDER 53.—GENERAL TERMS WHICH DO NOT INDICATE A DEFINITE OCCUPATION.)	572,934	19,989	592,923	281,630	854,164	+124
184	Manufacturers, businessmen and contractors otherwise unspecified.	19,210	1,487	20,697	13,207	16,081	+56.9
185	Cashiers, accountants, book-keepers, clerks and employees in unspecified offices, warehouses and shops.	26,880	2,252	29,132	20,816	85,648	+85
187	Labourers and workmen otherwise unspecified	521,533	16,216	537,749	221,141	747,871	+141.3
	SUB-CLASS XII.—UNPRODUCTIVE	608,577	5,630	614,207	598,985	810,864	+2.5
188	ORDER 54.—INMATES OF JAILS, ASYLUMS, AND HOSPITALS .. INMATES OF JAILS, ASYLUMS, AND ALMSHOUSES.	15,993	212	16,205	14,495	13,076	+12.7
	ORDER 55.—BEGGARS, VAGRANTS, PROSTITUTES	592,562	5,388	597,950	584,530	492,785	+2.3
	ORDER 56.—OTHER UNCLASSIFIED NON-PRODUCTIVE INDUSTRIES.	15	..	15			

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.		CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	
	Number of workers per 100 males.	Number of female workers per 100 males.		Number of workers per 100 males.	Number of female workers per 100 males.
PUNJAB —			ARORA SIKH —concluded.		
AGGARWAL (HINDU)—			X. —DOMESTIC SERVICE	24	5
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	89	12	XII.—LABOURERS UNSPECIFIED	37	55
Income from rent of land	15	37	XIII.—BEGGARS, PROSTITUTES, ETC. ..	12	7
Cultivators of all kinds	68	9	OTHERS	13	5
Others	6	2			
III.—INDUSTRIES	35	193	AWAN (MUSALMAN)—		
V.—TRADE	791	3	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	819	7
VII.—PUBLIC ADMINISTRATION	13	3	Cultivators of all kinds	789	7
IX.—PERSONS LIVING ON THEIR INCOME ..	17	17	Raisers of livestock, etc.	19	2
X.—DOMESTIC SERVICE	23	4	Others	11	2
OTHERS	32	12	III.—INDUSTRIES	31	59
			IV.—TRANSPORT	26	2
AHIR (HINDU)—			Labourers, boatmen, etc.	23	1
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	926	31	Others	3	6
Cultivators of all kinds	908	31	VI.—PUBLIC FORCE	28	2
Raisers of livestock, etc.	14	10	XII.—LABOURERS UNSPECIFIED	23	25
Others	4	26	XIII.—BEGGARS, PROSTITUTES, ETC. ..	18	25
IV.—TRANSPORT	18	1	OTHERS	57	9
Labourers, boatmen, etc.	17	1			
Others	1	1	BARWALA (MUSALMAN)—		
X.—DOMESTIC SERVICE	11	8	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	128	1
OTHERS	45	13	Income from rent of land	6	11
			Cultivators of all kinds	68	1
ARAIN (MUSALMAN)—			Field labourers, wood cutters, etc. ..	24	..
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	868	3	Raisers of livestock, etc.	28	..
Cultivators of all kinds	830	3	Others	2	2
Field labourers, wood cutters, etc. ..	17	2	III.—INDUSTRIES	345	84
Raisers of livestock, etc.	17	1	IV.—TRANSPORT	18	2
Others	4	1	Labourers, boatmen, etc.	16	2
III.—INDUSTRIES	18	59	Others	2	..
IV.—TRANSPORT	17	2	V.—TRADE	23	2
Labourers, boatmen, etc.	16	2	VI.—PUBLIC FORCE	9	..
Others	1	1			
V.—TRADE	27	37	X.—DOMESTIC SERVICE	354	6
XII.—LABOURERS UNSPECIFIED	29	22	XII.—LABOURERS UNSPECIFIED	80	68
OTHERS	41	6	XIII.—BEGGARS, PROSTITUTES, ETC. ..	24	13
			OTHERS	39	28
ARORA (HINDU)—					
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	148	6	BAWARIA (HINDU)—		
Income from rent of land	53	10	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	614	10
Cultivators of all kinds	85	3	Income from rent of land	10	13
Others	10	4	Cultivators of all kinds	396	6
III.—INDUSTRIES	49	87	Field labourers, wood cutters, etc. ..	157	20
Artisans and other workmen, etc. ..	48	88	Raisers of livestock, etc.	45	0
Others	1	2	Others	6	114
IV.—TRANSPORT	19	1	III.—INDUSTRIES	50	65
Labourers, boatmen, etc.	13	2	IV.—TRANSPORT	28	9
Others	6	..	V.—TRADE	15	50
V.—TRADE	651	2	VI.—PUBLIC FORCE	22	..
VI.—PUBLIC FORCE	11	..	XII.—LABOURERS UNSPECIFIED	106	50
VII.—PUBLIC ADMINISTRATION	21	1	XIII.—BEGGARS, PROSTITUTES, CRIMINALS		
VIII.—ARTS AND PROFESSIONS	14	9	AND INMATES OF JAILS AND ASY-		
X.—DOMESTIC SERVICE	29	5	LUMS	145	19
XII.—LABOURERS UNSPECIFIED	40	6	OTHERS	22	29
OTHERS	18	18			
ARORA (SIKH)—			BHARAI (MUSALMAN)—		
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	156	4	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	316	2
Income from rent of land	43	9	Income from rent of land	21	7
Cultivators of all kinds	104	2	Cultivators of all kinds	186	4
Others	9	13	Field labourers, wood cutters, etc. ..	58	1
III.—INDUSTRIES	42	75	Raisers of livestock, etc.	44	1
IV.—TRANSPORT	19	4	Others	7	..
Labourers, boatmen, etc.	12	6	III.—INDUSTRIES	32	135
Others	7	1	V.—TRADE	17	13
V.—TRADE	631	8	VIII.—ARTS AND PROFESSIONS	19	25
VII.—PUBLIC ADMINISTRATION	20	1	XII.—LABOURERS UNSPECIFIED	27	43
VIII.—ARTS AND PROFESSIONS	36	6	XIII.—BEGGARS, PROSTITUTES, CRIMI-		
IX.—PERSONS LIVING ON THEIR INCOME ..	10	28	NALS AND INMATES OF JAILS AND		
			ASYLUMS	580	6
			OTHERS	29	7

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3
BILOCH (MUSALMAN)—			CHIMBA (HINDU)—concluded.		
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	759	2	III.—INDUSTRIES ..	695	14
Income from rent of land ..	40	9	Artisans and other workmen ..	695	14
Cultivators of all kinds ..	599	1	IV.—TRANSPORT ..	9	1
Field labourers, wood cutters, etc. ..	43	2	V.—TRADE ..	36	8
Raisers of livestock, etc. ..	74	3	XII.—LABOURERS UNSPECIFIED ..	14	61
Others ..	3	24	OTHERS ..	33	9
III.—INDUSTRIES ..	30	111			
IV.—TRANSPORT ..	107	12	CHIMBA (SIKH)—		
X.—DOMESTIC SERVICE ..	14	10	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	308	2
XII.—LABOURERS UNSPECIFIED ..	45	33	Income from rent of land ..	28	14
XIII.—BEGGARS, PROSTITUTES, ETC. ..	20	14	Cultivators of all kinds ..	230	1
OTHERS ..	25	4	Field labourers, wood cutters, etc. ..	37	1
			Raisers of livestock, etc. ..	11	..
			Others ..	2	..
BRAHMAN (HINDU)—			III.—INDUSTRIES ..	606	9
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	539	22	Artisans and other workmen ..	585	10
Income from rent of land ..	40	43	Others ..	21	2
Cultivators of all kinds ..	472	21	V.—TRADE ..	25	2
Field labourers, wood cutters, etc. ..	10	17	OTHERS ..	61	8
Raisers of livestock, etc. ..	15	9			
Others ..	2	2	CHIMBA (MUSALMAN)—		
III.—INDUSTRIES ..	22	60	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	278	3
Artisans and other workmen ..	21	6	Income from rent of land ..	13	11
Others ..	1	2	Cultivators of all kinds ..	179	4
IV.—TRANSPORT ..	21	1	Field labourers, wood cutters, etc. ..	55	1
Labourers, boatmen, etc. ..	16	1	Raisers of livestock, etc. ..	25	1
Others ..	5	1	Others ..	6	..
V.—TRADE ..	86	2	III.—INDUSTRIES ..	616	15
VI.—PUBLIC FORCE ..	12	..	Artisans and other workmen ..	615	16
VII.—PUBLIC ADMINISTRATION ..	19	1	Others ..	1	..
VIII.—ARTS AND PROFESSIONS ..	220	15	IV.—TRANSPORT ..	14	..
Religion ..	202	19	Labourers, boatmen, etc. ..	13	..
Others ..	18	4	Others ..	1	..
X.—DOMESTIC SERVICE ..	35	8	V.—TRADE ..	18	4
XII.—LABOURERS UNSPECIFIED ..	10	24	X.—DOMESTIC SERVICE ..	10	1
XIII.—BEGGARS, PROSTITUTES, ETC. ..	26	3	XII.—LABOURERS UNSPECIFIED ..	35	28
OTHERS ..	10	12	XIII.—BEGGARS, PROSTITUTES, ETC. ..	9	9
CHAMAR (HINDU)—			OTHERS ..	22	5
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	426	20	CHUHRA (HINDU) —		
Income from rent of land ..	4	15	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	239	2
Cultivators of all kinds ..	211	20	Cultivators of all kinds ..	74	2
Field labourers, wood cutters, etc. ..	171	23	Field labourers, wood cutters, etc. ..	136	1
Raisers of livestock, etc. ..	35	4	Raisers of livestock, etc. ..	24	1
Others ..	5	26	Others ..	5	4
III.—INDUSTRIES ..	482	19	III.—INDUSTRIES ..	677	63
IV.—TRANSPORT ..	11	11	Artisans and other workmen ..	677	63
XII.—LABOURERS UNSPECIFIED ..	49	28	XII.—LABOURERS UNSPECIFIED ..	40	20
OTHERS ..	32	30	XIII.—BEGGARS, PROSTITUTES, ETC. ..	11	6
CHAMAR (SIKH)—			OTHERS ..	33	9
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	877	6	CHUHRA (SIKH) —		
Income from rent of land ..	5	10	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	558	1
Cultivators of all kinds ..	160	11	Cultivators of all kinds ..	129	1
Field labourers, wood cutters, etc. ..	104	2	Field labourers, wood cutters, etc. ..	348	1
Raisers of livestock, etc. ..	47	1	Raisers of livestock, etc. ..	77	1
Others ..	1	..	Others ..	2	15
III.—INDUSTRIES ..	511	18	III.—INDUSTRIES ..	319	55
Artisans and other workmen ..	510	18	Artisans and other workmen ..	318	65
Others ..	1	..	VI.—PUBLIC FORCE ..	16	..
IV.—TRANSPORT ..	14	29	XII.—LABOURERS UNSPECIFIED ..	59	20
Labourers, boatmen, etc. ..	12	17	XIII.—BEGGARS, PROSTITUTES, ETC. ..	14	17
Others ..	2	339	OTHERS ..	87	7
XII.—LABOURERS UNSPECIFIED ..	58	39	DAGI AND KOLI (HINDU)—		
XIII.—BEGGARS, PROSTITUTES, ETC. ..	10	16	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	953	48
OTHERS ..	30	8	Cultivators of all kinds ..	908	48
CHIMBA (HINDU)—			Field labourers, wood cutters, etc. ..	25	55
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	213	9	Raisers of livestock, etc. ..	19	50
Income from rent of land ..	6	40	Others ..	1	13
Cultivators of all kinds ..	162	10	III.—INDUSTRIES ..	21	36
Field labourers, wood cutters, etc. ..	27	2	Artisans and other workmen ..	21	36
Raisers of livestock, etc. ..	13	1	Others ..	26	21
Others ..	5	1			

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3
DHANAK (HINDU)—			GUJJAR (MUSALMAN)—		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	315	24	I.—EXPLOITATION OF ANIMALS AND VEGETATION	907	7
Income from rent of land	2	4	Cultivators of all kinds	893	7
Cultivators of all kinds	123	23	Others	14	3
Field labourers, wood cutters, etc.	118	35	IV.—TRANSPORT	15	..
Raisers of livestock, etc.	66	12	XII.—LABOURERS UNSPECIFIED	16	24
Others	6	1	OTHERS	62	17
III.—INDUSTRIES	353	15			
IV.—TRANSPORT	14	18	HARNI (MUSALMAN)—		
X.—DOMESTIC SERVICE	220	79	I.—EXPLOITATION OF ANIMALS AND VEGETATION	547	5
XII.—LABOURERS UNSPECIFIED	52	62	Income from rent of land	26	25
OTHERS	46	43	Cultivators of all kinds	440	5
			Field labourers, wood cutters, etc.	43	2
DHOBI (MUSALMAN).—			Raisers of livestock, etc.	37	..
I.—EXPLOITATION OF ANIMALS AND VEGETATION	172	2	Others	1	..
Income from rent of land	7	13	III.—INDUSTRIES	12	50
Cultivators of all kinds	128	1	IV.—TRANSPORT	18	..
Field labourers, wood cutters, etc.	23	2	V.—TRADE	54	30
Raisers of livestock, etc.	13	4	XII.—LABOURERS UNSPECIFIED	42	26
Others	1	..	XIII.—BEGGARS, PROSTITUTES, CRIMINALS, AND	309	6
III.—INDUSTRIES	740	16	INMATES OF JAILS AND ASYLUMS.		
Artisans and other workmen	740	16	OTHERS	18	55
X.—DOMESTIC SERVICE	11	16			
XII.—LABOURERS UNSPECIFIED	29	43	JAT (HINDU)—		
XIII.—BEGGARS, PROSTITUTES, ETC.	15	19	I.—EXPLOITATION OF ANIMALS AND VEGETATION	959	18
OTHERS	33	9	Cultivators of all kinds	937	13
			Raisers of livestock, etc.	19	10
DOGAR (MUSALMAN).—			Others	3	2
I.—EXPLOITATION OF ANIMALS AND VEGETATION	947	3	OTHERS	41	18
Cultivators of all kinds	895	4			
Field labourers, wood cutters, etc.	11	7	JAT (SIKH)—		
Raisers of livestock, etc.	40	..	I.—EXPLOITATION OF ANIMALS AND VEGETATION	960	4
Others	1	..	Cultivators of all kinds	939	4
OTHERS	53	21	Raisers of livestock, etc.	15	..
			Others	6	1
FAQIR (MUSALMAN).—			VI.—PUBLIC FORCE	12	..
I.—EXPLOITATION OF ANIMALS AND VEGETATION	291	1	OTHERS	28	11
Income from rent of land	17	14			
Cultivators of all kinds	199	3	JAT (MUSALMAN).—		
Field labourers, wood cutters, etc.	45	12	I.—EXPLOITATION OF ANIMALS AND VEGETATION	862	3
Raisers of livestock, etc.	29	1	Cultivators of all kinds	795	3
Others	1	..	Field labourers, wood cutters, etc.	24	1
III.—INDUSTRIES	35	65	Raisers of livestock, etc.	42	2
IV.—TRANSPORT	14	..	Others	1	1
V.—TRADE	16	5	III.—INDUSTRIES	27	45
VIII.—ARTS AND PROFESSIONS	30	7	IV.—TRANSPORT	21	2
Religion	20	4	Labourers, boatmen, etc.	20	2
Others	10	58	Others	1	1
X.—DOMESTIC SERVICE	13	7	X.—DOMESTIC SERVICE	11	9
XII.—LABOURERS UNSPECIFIED	21	19	XII.—LABOURERS UNSPECIFIED	31	16
XIII.—BEGGARS, PROSTITUTES, CRIMI-			XIII.—BEGGARS, PROSTITUTES, ETC.	18	15
NALS AND INMATES OF JAILS AND			OTHERS	30	4
ASYLUMS	566	10			
OTHERS	14	4	JHIWAR (HINDU).—		
GHIRATH (HINDU).—			I.—EXPLOITATION OF ANIMALS AND VEGETATION	209	18
I.—EXPLOITATION OF ANIMALS AND VEGETATION	928	27	Income from rent of land	11	17
Cultivators of all kinds	893	25	Cultivators of all kinds	123	9
Field labourers, wood cutters, etc.	13	14	Field labourers, wood cutters, etc.	55	8
Raisers of livestock, etc.	15	13	Raisers of livestock, etc.	14	2
Others	7	..	Others	6	6
OTHERS	72	12	III.—INDUSTRIES	63	28
GUJJAR (HINDU).—			Artisans and other workmen	62	29
I.—EXPLOITATION OF ANIMALS AND VEGETATION	911	12	Others	1	3
Cultivators of all kinds	904	14	IV.—TRANSPORT	16	3
Field labourers, wood cutters, etc.	6	9	Labourers, boatmen, etc.	14	4
Others	1	2	Others	2	1
III.—INDUSTRIES	23	186	V.—TRADE	20	15
IV.—TRANSPORT	14	2	X.—DOMESTIC SERVICE	633	51
X.—DOMESTIC SERVICE	10	10	XII.—LABOURERS UNSPECIFIED	27	15
XII.—LABOURERS UNSPECIFIED	27	13	OTHERS	22	10
OTHERS	15	10			

(OCCUPATIONAL)--SUBSIDIARY TABLE VIII.

Occupations of selected castes--continued.

CASTE AND OCCUPATION.			CASTE AND OCCUPATION.		
	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.		Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3
JHIWAR (SIKH)--			KAMBOH (KAMBOJ) MUSALMAN--		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	105	2	I.—EXPLOITATION OF ANIMALS AND VEGETATION	822	3
Income from rent of land	5	14	Cultivators of all kinds	767	3
Cultivators of all kinds	82	1	Field labourers, wood cutters, etc.	21	7
Field labourers, wood cutters, etc.	12	2	Raisers of livestock, etc.	32	4
Others	6	1	Others	2	2
III.—INDUSTRIES	25	33	III.—INDUSTRIES	38	62
IV.—TRANSPORT	9	..	Artisans and other workmen	35	65
V.—TRADE	23	..	Others	1	4
X.—DOMESTIC SERVICE	789	56	IV.—TRANSPORT	32	1
OTHERS	49	24	V.—TRADE	32	23
JHIWAR (MUSALMAN)--			X.—DOMESTIC SERVICE	10	2
I.—EXPLOITATION OF ANIMALS AND VEGETATION	124	3	XII.—LABOURERS UNSPECIFIED	31	23
Cultivators of all kinds	80	3	XIII.—BEGGARS, PROSTITUTES, ETC.	11	16
Field labourers, wood cutters, etc.	21	2	OTHERS	26	5
Others	23	2	KANET (HINDU)--		
III.—INDUSTRIES	54	78	I.—EXPLOITATION OF ANIMALS AND VEGETATION	972	49
IV.—TRANSPORT	20	1	Cultivators of all kinds	942	49
Labourers and boatmen, etc.	17	1	Field labourers, wood cutters, etc.	7	80
Others	3	221	Raisers of livestock, etc.	20	55
V.—TRADE	18	5	Others	3	2
X.—DOMESTIC SERVICE	715	57	OTHERS	28	17
XII.—LABOURERS UNSPECIFIED	36	90	KASHMIRI (MUSALMAN)--		
XIII.—BEGGARS, PROSTITUTES, ETC.	9	46	I.—EXPLOITATION OF ANIMALS AND VEGETATION	161	4
OTHERS	24	37	Income from rent of land	14	23
JULAHA (HINDU)--			Cultivators of all kinds	117	4
I.—EXPLOITATION OF ANIMALS AND VEGETATION	384	35	Field labourers, wood cutters, etc.	15	1
Income from rent of land	15	743	Raisers of livestock, etc.	14	1
Cultivators of all kinds	285	30	Others	1	..
Field labourers, wood cutters, etc.	51	32	III.—INDUSTRIES	549	13
Raisers of livestock, etc.	26	19	Artisans and other workmen	517	6
Others	7	150	Others	2	1
II.—EXTRACTION OF MINERALS	15	29	IV.—TRANSPORT	62	1
III.—INDUSTRIES	465	40	Labourers and boatmen	59	1
Artisans and other workmen	463	40	Others	3	1
Others	2	109	V.—TRADE	55	3
IV.—TRANSPORT	23	19	X.—DOMESTIC SERVICE	28	18
V.—TRADE	10	23	XII.—LABOURERS UNSPECIFIED	64	29
X.—DOMESTIC SERVICE	18	14	XIII.—BEGGARS, PROSTITUTES, ETC.	19	39
XII.—LABOURERS UNSPECIFIED	61	33	OTHERS	62	12
OTHERS	24	45	KHATRI (HINDU)--		
JULAHA (MUSALMAN)--			I.—EXPLOITATION OF ANIMALS AND VEGETATION	104	11
I.—EXPLOITATION OF ANIMALS AND VEGETATION	124	3	Income from rent of land	36	22
Income from rent of land	5	14	Cultivators of all kinds	56	6
Cultivators of all kinds	77	4	Raisers of livestock, etc.	5	2
Field labourers, wood cutters, etc.	21	2	Others	7	2
Raisers of livestock, etc.	20	1	III.—INDUSTRIES	64	52
Others	1	4	Artisans and other workmen	61	55
III.—INDUSTRIES	782	24	Others	3	7
Artisans and other workmen	782	24	IV.—TRANSPORT	46	1
IV.—TRANSPORT	11	2	Labourers, boatmen, etc.	27	1
V.—TRADE	11	5	Others	19	..
X.—DOMESTIC SERVICE	14	15	V.—TRADE	2	..
XII.—LABOURERS UNSPECIFIED	22	47	VII.—PUBLIC ADMINISTRATION	580	2
XIII.—BEGGARS, PROSTITUTES, ETC.	13	32	VIII.—ARTS AND PROFESSIONS	47	..
OTHERS	23	14	Lawyers, doctors and teachers, etc.	32	6
KAMBOH (KAMBOJ) SIKH--			Others	25	4
I.—EXPLOITATION OF ANIMALS AND VEGETATION	931	2	IX.—PERSONS LIVING ON THEIR INCOME	7	12
Cultivators of all kinds	902	2	X.—DOMESTIC SERVICE	16	26
Raisers of livestock, etc.	25	..	OTHERS	41	5
Others	4	..	OTHERS	70	16
XII.—LABOURERS UNSPECIFIED	10	75	KHATRI (SIKH)--		
OTHERS	59	13	I.—EXPLOITATION OF ANIMALS AND VEGETATION	224	9
			Income from rent of land	84	21
			Cultivators of all kinds	132	4
			Field labourers, wood cutters, etc.	5	6
			Others	3	1

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	number per 100 males.	in each occupat- ion.	in 100 males.	CASTE AND OCCUPATION.	number per 100 males.	in each occupat- ion.	in 100 males.
1	2			1			
KHATRI (SIKH)—concluded.				JUMHAR (MUSALMAN)—concluded.			
III.—INDUSTRIES	60	56		III.—INDUSTRIES	632		
Artisans and other workmen	59	56		Artisans and other workmen	632		
Others	1	6		IV.—TRANSPORT	66		
IV.—TRANSPORT	36	2		V.—TRADE	34		
Labourers, boatmen, etc.	24	1		X.—DOMESTIC SERVICE	9	11	
Others	12	1		XII.—LABOURERS UNSPECIFIED	47	34	
V.—TRADE	459			XIII.—BEGGARS, PROSTITUTES, ETC.	12	25	
VII.—PUBLIC ADMINISTRATION	40			Others	16	18	
VIII.—ARTS AND PROFESSIONS	52	7		JOHAR (HINDU)—			
Lawyers, doctors, teachers, etc.	25	6		I.—EXPLOITATION OF ANIMALS AND VEGETATION	417	33	
Others	27	8		Income from rent of land	12	42	
IX.—PERSONS LIVING ON THEIR INCOME	29	18		Cultivators of all kinds	357	34	
X.—DOMESTIC SERVICE	25	8		Field labourers, wood cutters, etc.	29	25	
Others	75	16		Raisers of livestock, etc.	18	21	
KHOJA (MUSALMAN) —				Others	1	4	
I.—EXPLOITATION OF ANIMALS AND VEGETATION	202			III.—INDUSTRIES	538	9	
Income from rent of land	16	13		Artisans and other workmen	538	9	
Cultivators of all kinds	119	2		Others	45		
Field labourers, wood cutters, etc.	49	1		JOHAR (MUSALMAN)—			
Raisers of livestock, etc.	17	17		I.—EXPLOITATION OF ANIMALS AND VEGETATION	201		
Others	3	23		Income from rent of land	15		
III.—INDUSTRIES	135	2		Cultivators of all kinds	141		
V.—TRADE	502	12		Field labourers, wood cutters, etc.	20		
XII.—LABOURERS UNSPECIFIED	68	5		Raisers of livestock, etc.	11		
XIII.—BEGGARS, PROSTITUTES, ETC.	25	6		Others	1		
Others	68	6		III.—INDUSTRIES	714	8	
KHOKHAR (MUSALMAN) —				Artisans and other workmen	713	33	
I.—EXPLOITATION OF ANIMALS AND VEGETATION	700			Others	1	12	
Income from rent of land	629			X.—DOMESTIC SERVICE	13	9	
Cultivators of all kinds	14			XII.—LABOURERS UNSPECIFIED	19	43	
Field labourers, wood cutters, etc.	14			Others	53	9	
Raisers of livestock, etc.	56			MACHHI (MUSALMAN)—			
Others	1	18		I.—EXPLOITATION OF ANIMALS AND VEGETATION	22		
II.—EXTRACTION OF MINERALS	13	27		Income from rent of land	10		
III.—INDUSTRIES	85			Cultivators of all kinds	154		
IV.—TRANSPORT	24			Field labourers, wood cutters, etc.	33		
V.—TRADE	13			Raisers of livestock, etc.	16		
VIII.—ARTS AND PROFESSIONS	14			Others	5		
Lawyers, doctors, and teachers, etc.	10			III.—INDUSTRIES	52		
Others	4			IV.—TRANSPORT	28		
X.—DOMESTIC SERVICE	28			Labourers, boatmen, etc.	26		
XII.—LABOURERS UNSPECIFIED	52			Others	2	16	
XIII.—BEGGARS, PROSTITUTES, ETC.	43			V.—TRADE	12	5	
Others	28			X.—DOMESTIC SERVICE	599	33	
KUMHAR (HINDU)—				XII.—LABOURERS UNSPECIFIED	52	30	
I.—EXPLOITATION OF ANIMALS AND VEGETATION	293	11		XIII.—BEGGARS, PROSTITUTES, ETC.	13	16	
Income from rent of land	6	1		Others	23	20	
Cultivators of all kinds	240	2		MAHTAM (SIKH) —			
Field labourers, wood cutters, etc.	23	18		I.—EXPLOITATION OF ANIMALS AND VEGETATION	924		
Raisers of livestock, etc.	22	11		Income from rent of land	11	16	
Others	2	3		Cultivators of all kinds	838	1	
II.—EXTRACTION OF MINERALS	22	10		Field labourers, wood cutters, etc.	10	16	
III.—INDUSTRIES	540	1		Raisers of livestock, etc.	16	5	
Artisans and other workmen	539	1		Fishing and hunting	4	12	
Others	1	9		III.—INDUSTRIES	49	108	
IV.—TRANSPORT	67	6		Others	27	34	
V.—TRADE	30	1		WALI (HINDU)—			
XII.—LABOURERS UNSPECIFIED	29	23		I.—EXPLOITATION OF ANIMALS AND VEGETATION	881	13	
Others	19	18		Cultivators of all kinds	738	17	
KUMHAR (MUSALMAN)—				Field labourers, wood cutters, etc.	64	30	
I.—EXPLOITATION OF ANIMALS AND VEGETATION	184			Raisers of livestock, etc.	28	6	
Income from rent of land	11			Others	1	4	
Cultivators of all kinds	123			III.—INDUSTRIES	24	52	
Field labourers, wood cutters, etc.	32			V.—TRADE	84	234	
Others	18			X.—DOMESTIC SERVICE	21	1	
				Others	46	10	

(OCCUPATIONAL)--SUBSIDIARY TABLE VIII.

Occupations of selected castes - continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3
MALIAR (MUSALMAN)--			MOGHAL (MUSALMAN)--		
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	845	6	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	681	5
Cultivators of all kinds ..	805	7	Cultivators of all kinds ..	656	5
Field labourers, wood cutters, etc. ..	23	2	Field labourers, wood cutters, etc. ..	12	..
Raisers of livestock, etc. ..	11	9	Raiser of livestock, etc. ..	12	..
Others ..	3	5	Others ..	1	6
III.—INDUSTRIES ..	35	71	III.—INDUSTRIES ..	79	81
IV.—TRANSPORT ..	14	7	IV.—TRANSPORT ..	42	1
Labourers, boatmen, etc. ..	13	8	Labourers, boatmen, etc. ..	39	..
Others ..	1	..	Others ..	3	1
X.—DOMESTIC SERVICE ..	13	46	V.—TRADE ..	29	3
XII.—LABOURERS UNSPECIFIED ..	30	41	VI.—PUBLIC FORCE ..	31	..
XIII.—BEGGARS, PROSTITUTES, ETC. ..	16	34	VII.—PUBLIC ADMINISTRATION ..	20	1
OTHERS ..	47	28	VIII.—ARTS AND PROFESSIONS ..	20	3
			X.—DOMESTIC SERVICE ..	26	8
MALLAH (MUSALMAN)--			XII.—LABOURERS UNSPECIFIED ..	30	12
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	512	2	XIII.—BEGGARS, PROSTITUTES, ETC. ..	22	36
Income from rent of land ..	20	11	OTHERS ..	20	28
Cultivators of all kinds ..	376	1			
Field labourers, wood cutters, etc. ..	50	2	MUSSALMI (MUSALMAN)--		
Raisers of livestock, etc. ..	21	4	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	298	1
Fishing and hunting ..	39	5	Cultivators of all kinds ..	153	1
Others ..	3	11	Field labourers, wood cutters, etc. ..	115	2
III.—INDUSTRIES ..	104	36	Raisers of livestock, etc. ..	19	2
IV.—TRANSPORT ..	254	3	Others ..	11	5
Labourers, boatmen, etc. ..	253	3	III.—INDUSTRIES ..	418	19
Others ..	1	7	Artisans and other workmen ..	418	19
XII.—LABOURERS UNSPECIFIED ..	63	26	IV.—TRANSPORT ..	14	2
OTHERS ..	67	16	X.—DOMESTIC SERVICE ..	25	9
			XII.—LABOURERS UNSPECIFIED ..	152	12
MEO (MUSALMAN)--			XIII.—BEGGARS, PROSTITUTES, ETC. ..	72	48
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	975	5	OTHERS ..	21	12
Cultivators of all kinds ..	970	5			
Others ..	5	1	NAI (HINDU)--		
OTHERS ..	25	37	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	197	16
			Income from rent of land ..	7	26
MIRASI (MUSALMAN)--			Cultivators of all kinds ..	165	16
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	74	4	Field labourers, wood cutters, etc. ..	12	9
Income from rent of land ..	4	26	Raisers of livestock, etc. ..	12	16
Cultivators of all kinds ..	46	2	Others ..	1	17
Field labourers, wood cutters, etc. ..	15	3	III.—INDUSTRIES ..	752	17
Raisers of livestock, etc. ..	8	3	OTHERS ..	51	15
Others ..	1	71	NAI (SIKH)--		
III.—INDUSTRIES ..	38	41	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	287	2
VIII.—ARTS AND PROFESSIONS ..	44	15	Income from rent of land ..	18	30
X.—DOMESTIC SERVICE ..	23	11	Cultivators of all kinds ..	238	1
XII.—LABOURERS UNSPECIFIED ..	22	53	Field labourers, wood cutters, etc. ..	20	..
XIII.—BEGGARS, PROSTITUTES, CRIMI- NALS AND INMATES OF JAILS AND ASYLUMS ..	766	19	Raisers of livestock, etc. ..	11	..
Others ..	33	5	Others ..	..	..
			III.—INDUSTRIES ..	662	1
MOCHI (MUSALMAN)--			OTHERS ..	51	6
I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	143	3			
Income from rent of land ..	8	12	NAI (MUSALMAN)--		
Cultivators of all kinds ..	94	2	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	131	4
Field labourers, wood cutters, etc. ..	26	2	Income from rent of land ..	10	15
Raisers of livestock, etc. ..	14	7	Cultivators of all kinds ..	97	3
Others ..	1	..	Field labourers, wood cutters, etc. ..	15	4
III.—INDUSTRIES ..	776	10	Raisers of livestock, etc. ..	8	2
Artisans and other workmen ..	774	10	Others ..	1	6
Others ..	2	2	III.—INDUSTRIES ..	802	9
X.—DOMESTIC SERVICE ..	13	17	OTHERS ..	67	24
XII.—LABOURERS UNSPECIFIED ..	29	90			
XIII.—BEGGARS, PROSTITUTES, ETC. ..	11	29	PAKHIWARA (MUSALMAN)--		
OTHERS ..	38	15	I.—EXPLOITATION OF ANIMALS AND VEGETATION ..	331	1
			Income from rent of land ..	18	7
			Cultivators of all kinds ..	206	..
			Field labourers, wood cutters, etc. ..	29	..
			Raisers of livestock, etc. ..	12	..
			Fishing and hunting ..	62	5
			Others ..	4	..

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
1	2	3	1	2	3
PAKHIWARA (MUSALMAN)—concluded.			RAJPUT (HINDU)—concluded.		
III.—INDUSTRIES	43	30	III.—INDUSTRIES	32	15
V.—TRADE	150	41	Artisans and other workmen	31	15
XII.—LABOURERS UNSPECIFIED	150	5	Others	1	2
XIII.—BEGGARS, PROSTITUTES, CRIMINALS AND INMATES OF JAILS AND ASYLUMS	301	12	IV.—TRANSPORT	18	4
OTHERS	25	29	Labourers, boatmen, etc.	17	4
			Others	1	2
PATHAN (MUSALMAN)—			V.—TRADE	15	4
I.—EXPLOITATION OF ANIMALS AND VEGETATION	572	8	VI.—PUBLIC FORCE	22	..
Cultivators of all kinds	536	5	X.—DOMESTIC SERVICE	24	6
Field labourers, wood cutters, etc.	9	10	OTHERS	57	17
Raisers of livestock, etc.	25	28	RAJPUT (MUSALMAN)—		
Others	2	..	I.—EXPLOITATION OF ANIMALS AND VEGETATION	858	5
III.—INDUSTRIES	65	21	Cultivators of all kinds	822	5
Artisans and other workmen	61	24	Field labourers, wood cutters, etc.	10	1
Others	1	4	Raisers of livestock, etc.	25	1
IV.—TRANSPORT	50	1	Others	1	8
Labourers, boatmen, etc.	45	1	III.—INDUSTRIES	31	34
Others	5	1	IV.—TRANSPORT	21	2
V.—TRADE	45	2	V.—TRADE	12	..
VI.—PUBLIC FORCE	47	..	VI.—PUBLIC FORCE	11	..
VII.—PUBLIC ADMINISTRATION	23	..	VII.—PUBLIC ADMINISTRATION	9	..
X.—DOMESTIC SERVICE	41	8	XII.—LABOURERS UNSPECIFIED	18	4
XII.—LABOURERS UNSPECIFIED	73	9	OTHERS	40	18
XIII.—BEGGARS, PROSTITUTES, ETC.	45	18	SAINI (HINDU)—		
OTHERS	33	8	I.—EXPLOITATION OF ANIMALS AND VEGETATION	897	93
QASSAB (MUSALMAN)—			Cultivators of all kinds	872	9
I.—EXPLOITATION OF ANIMALS AND VEGETATION	201	3	Field labourers, wood cutters, etc.	5	1
Income from rent of land	14	4	Raisers of livestock, etc.	17	8
Cultivators of all kinds	115	2	Others	3	1
Field labourers, wood cutters, etc.	25	6	III.—INDUSTRIES	14	94
Raisers of livestock, etc.	16	1	Artisans and other workmen	13	105
Others	1	3	Others	1	..
III.—INDUSTRIES	484	13	V.—TRADE	18	10
IV.—TRANSPORT	30	1	VI.—PUBLIC FORCE	19	..
Labourers, boatmen, etc.	29	1	OTHERS	52	24
Others	1	5	SAINI (SIKH)—		
V.—TRADE	179	2	I.—EXPLOITATION OF ANIMALS AND VEGETATION	933	6
XII.—LABOURERS UNSPECIFIED	53	23	Cultivators of all kinds	911	7
OTHERS	53	14	Field labourers, wood cutters, etc.	12	1
			Raisers of livestock, etc.	9	2
JURESHI (MUSALMAN).—			Others	1	8
I.—EXPLOITATION OF ANIMALS AND VEGETATION	627	6	VI.—PUBLIC FORCE	18	..
Cultivators of all kinds	603	6	OTHERS	49	18
Field labourers, wood cutters, etc.	10	3	SANSI (HINDU)—		
Raisers of livestock, etc.	12	1	I.—EXPLOITATION OF ANIMALS AND VEGETATION	272	7
Others	2	..	Income from rent of land	14	18
III.—INDUSTRIES	55	37	Cultivators of all kinds	70	3
Artisans and other workmen	55	37	Field labourers, wood cutters, etc.	86	13
IV.—TRANSPORT	37	2	Raisers of livestock, etc.	99	5
Labourers, boatmen, etc.	32	1	Others	3	..
Others	5	3	III.—INDUSTRIES	22	101
V.—TRADE	27	2	IV.—TRANSPORT	20	7
VII.—PUBLIC ADMINISTRATION	23	..	V.—TRADE	30	63
VIII.—ARTS AND PROFESSIONS	76	7	XII.—LABOURERS UNSPECIFIED	37	15
Religion	50	6	XIII.—BEGGARS, PROSTITUTES, CRIMINALS AND INMATES OF JAILS AND ASYLUMS	580	40
Others	26	8	OTHERS	29	3
XIII.—BEGGARS, PROSTITUTES, ETC.	71	12	SAYAD (MUSALMAN)—		
OTHERS	81	19	I.—EXPLOITATION OF ANIMALS AND VEGETATION	281	5
RAJPUT (HINDU).—			Income from rent of land	55	19
I.—EXPLOITATION OF ANIMALS AND VEGETATION	832	19	Cultivators of all kinds	197	..
Cultivators of all kinds	806	19			
Field labourers, wood cutters, etc.	6	5			
Raisers of livestock, etc.	16	8			
Others	4	1			

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.		CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	
	Number of males.	Number of females.		Number of males.	Number of females.
SAYAD (MUSALMAN)—concluded.			TARKHAN (SIKH)—concluded.		
Field labourers, wood cutters, etc.	16	1	Raisers of live-stock, etc.	2	3
Raisers of livestock, etc.	12	1	Others	3	..
Others	1	..	III.—INDUSTRIES	610	8
III.—INDUSTRIES	40	48	IV.—TRANSPORT	16	1
IV.—TRANSPORT	33	..	XII.—LABOURERS UNSPECIFIED	17	25
Labourers, boatmen, etc.	30	..	Others	40	16
Others	3	..	TARKHAN (MUSALMAN)—		
V.—TRADE	23	8	I.—EXPLOITATION OF ANIMALS AND VEGETATION	204	8
VI.—PUBLIC FORCE	32	..	Income from rent of land	17	14
VII.—PUBLIC ADMINISTRATION	33	..	Cultivators of all kinds	149	2
VIII.—ARTS AND PROFESSIONS	407	7	Field labourers, wood cutters, etc.	29	1
Religion	381	8	Raisers of live-stock, etc.	8	3
Others	23	9	Others	1	13
X.—DOMESTIC SERVICE	24	5	III.—INDUSTRIES	725	8
XII.—LABOURERS UNSPECIFIED	23	16	XII.—LABOURERS UNSPECIFIED	25	35
XIII.—BEGGARS, PROSTITUTES, ETC.	94	12	Others	46	13
Others	10	14	TELI (MUSALMAN)		
SHEIKH (MUSALMAN)—			I.—EXPLOITATION OF ANIMALS AND VEGETATION	301	8
I.—EXPLOITATION OF ANIMALS AND VEGETATION	215	4	Income from rent of land	11	10
Income from rent of land	21	15	Cultivators of all kinds	201	4
Cultivators of all kinds	138	3	Field labourers, wood cutters, etc.	49	1
Field labourers, wood cutters, etc.	30	2	Raisers of livestock, etc.	38	1
Raisers of livestock, etc.	20	1	Others	2	1
Others	6	1	III.—INDUSTRIES	563	9
III.—INDUSTRIES	132	21	IV.—TRANSPORT	24	..
Artisans and other workmen	130	21	V.—TRADE	30	2
Others	2	2	XII.—LABOURERS UNSPECIFIED	39	27
IV.—TRANSPORT	61	1	Others	43	16
Labourers, boatmen, etc.	54	1	EUROPEANS—		
Others	7	..	IV.—TRANSPORT	52	3
V.—TRADE	293	3	Owners, managers, ship's officers, etc.	48	3
VI.—PUBLIC FORCE	49	..	Labourers, boatmen, etc.	4	..
VII.—PUBLIC ADMINISTRATION	38	..	VI.—PUBLIC FORCE	805	..
VIII.—ARTS AND PROFESSIONS	38	8	Commissioned and Gazetted Officers	81	..
Religion	11	2	Others	724	..
Lawyers, doctors, etc.	16	5	VII.—PUBLIC ADMINISTRATION	46	5
Others	11	21	Gazetted Officers	25	1
X.—DOMESTIC SERVICE	61	7	Others	21	11
XII.—LABOURERS UNSPECIFIED	45	13	VIII.—ARTS AND PROFESSIONS	53	146
XIII.—BEGGARS, PROSTITUTES, ETC.	45	17	Religion	12	74
Others	20	8	Lawyers, doctors, etc.	28	132
SUNAR (HINDU)—			Others	13	376
I.—EXPLOITATION OF ANIMALS AND VEGETATION	84	22	Others	44	29
Income from rent of land	7	22	ANGLO-INDIANS—		
Cultivators of all kinds	66	25	III.—INDUSTRIES	28	30
Field labourers, wood cutters, etc.	6	5	Artisans and other workmen	20	45
Raisers of livestock, etc.	4	5	Others	8	..
Others	1	14	IV.—TRANSPORT	449	8
III.—INDUSTRIES	871	5	Owners, managers, ship's officers, etc.	407	4
V.—TRADE	18	9	Labourers, boatmen, etc.	42	..
Others	47	25	V.—TRADE	21	14
SUNAR (MUSALMAN)—			VI.—PUBLIC FORCE	156	..
I.—EXPLOITATION OF ANIMALS AND VEGETATION	55	7	Commissioned and Gazetted Officers	72	..
Cultivators of all kinds	18	8	Others	84	..
Others	7	2	VII.—PUBLIC ADMINISTRATION	118	9
III.—INDUSTRIES	877	2	Gazetted Officers	39	..
Others	68	25	Others	79	14
TARKHAN (HINDU)—			VIII.—ARTS AND PROFESSIONS	143	83
I.—EXPLOITATION OF ANIMALS AND VEGETATION	350	27	Religion	8	71
Income from rent of land	11	79	Lawyers, doctors, etc.	95	57
Cultivators of all kinds	302	27	Others	40	332
Field labourers, wood cutters, etc.	17	21	IX.—PERSONS LIVING ON THEIR INCOME	30	34
Raisers of livestock, etc.	17	14	X.—DOMESTIC SERVICE	27	10
Others	17	4	XI.—CONTRACTORS, CLERKS, ETC.	13	100
III.—INDUSTRIES	611	4	Others	15	64
XII.—LABOURERS UNSPECIFIED	11	33	ARMENIANS—		
Others	23	13	IV.—TRANSPORT	175	..
TARKHAN (SIKH)—			V.—TRADE	125	..
I.—EXPLOITATION OF ANIMALS AND VEGETATION	317	4	VI.—PUBLIC FORCE	125	..
Income from rent of land	29	33	VII.—PUBLIC ADMINISTRATION	250	..
Cultivators of all kinds	264	2	VIII.—ARTS AND PROFESSIONS	250	..
Field labourers, wood cutters, etc.	17	1	IX.—PERSONS LIVING ON THEIR INCOME	175	..

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.	CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 100 males.
DELHI.			BRAHMAN (HINDU)—concluded.		
AGGARWAL (HINDU)—			X.—DOMESTIC SERVICE	32	11
I.—EXPLOITATION OF ANIMALS AND VEGETATION	12	5	XII.—LABOURERS UNSPECIFIED	13	21
Income from rent of land	2	18	XIII.—BEGGARS, PROSTITUTES, ETC. .. .	10	18
Cultivators of all kinds	9	4	OTHERS	56	7
Others	1	..			
III.—INDUSTRIES	65	21	CHAMAR (HINDU)—		
Artisans and other workmen	62	22	I.—EXPLOITATION OF ANIMALS AND VEGETATION	195	21
Others	3	..	Cultivators of all kinds	53	14
IV.—TRANSPORT	47	1	Field labourers, wood cutters, etc. .. .	138	24
Labourers, boatmen, etc.	30	2	Others	4	8
Others	17	..	III.—INDUSTRIES	456	32
V.—TRADE	772	4	IV.—TRANSPORT	86	1
VII.—PUBLIC ADMINISTRATION	17	..	V.—TRADE	17	38
VIII.—ARTS AND PROFESSIONS	19	5	XII.—LABOURERS UNSPECIFIED	228	46
IX.—PERSONS LIVING ON THEIR INCOME	17	64	OTHERS	20	24
X.—DOMESTIC SERVICE	24	9			
XI.—CONTRACTORS, CLERKS, ETC. .. .	19	1	CHUHRA (HINDU)—		
OTHERS	8	52	I.—EXPLOITATION OF ANIMALS AND VEGETATION	39	9
AGGARWAL (JAIN)—			Cultivators of all kinds	10	..
III.—INDUSTRIES	52	45	Field labourers, wood cutters, etc. .. .	22	17
IV.—TRANSPORT	48	..	Others	7	..
V.—TRADE	728	3	III.—INDUSTRIES	839	55
VII.—PUBLIC ADMINISTRATION	47	..	IV.—TRANSPORT	21	5
IX.—PERSONS LIVING ON THEIR INCOME	52	69	VI.—PUBLIC FORCE	10	..
OTHERS	73	14	VII.—PUBLIC ADMINISTRATION	47	4
AHIR (HINDU)—			X.—DOMESTIC SERVICE	12	14
I.—EXPLOITATION OF ANIMALS AND VEGETATION	712	5	XII.—LABOURERS UNSPECIFIED	12	12
Cultivators of all kinds	682	5	OTHERS	20	29
Raisers of livestock, etc.	18	21			
Others	12	..	DHANAK (HINDU)—		
III.—INDUSTRIES	51	8	I.—EXPLOITATION OF ANIMALS AND VEGETATION	70	21
IV.—TRANSPORT	83	1	Cultivators of all kinds	21	33
V.—TRADE	59	6	Field labourers, wood cutters, etc. .. .	41	20
VI.—PUBLIC FORCE	28	..	Others	8	..
X.—DOMESTIC SERVICE	30	3	III.—INDUSTRIES	183	21
XII.—LABOURERS UNSPECIFIED	16	13	IV.—TRANSPORT	117	..
OTHERS	21	3	X.—DOMESTIC SERVICE	419	8
ARAIN (MUSALMAN)—			XII.—LABOURERS UNSPECIFIED	165	22
I.—EXPLOITATION OF ANIMALS AND VEGETATION	620	3	OTHERS	46	..
Cultivators of all kinds	601	3	DHOBI (HINDU)—		
Others	19	..	I.—EXPLOITATION OF ANIMALS AND VEGETATION	32	19
III.—INDUSTRIES	148	10	Cultivators of all kinds	14	7
IV.—TRANSPORT	47	..	Field labourers, wood cutters, etc. .. .	10	71
V.—TRADE	97	2	Others	8	..
VI.—PUBLIC FORCE	40	..	III.—INDUSTRIES	845	32
IX.—PERSONS LIVING ON THEIR INCOME	39	..	IV.—TRANSPORT	70	..
OTHERS	9	20	X.—DOMESTIC SERVICE	14	12
BRAHMAN (HINDU)—			XII.—LABOURERS UNSPECIFIED	22	24
I.—EXPLOITATION OF ANIMALS AND VEGETATION	230	8	OTHERS	17	11
Cultivators of all kinds	211	8	DHOBI (MUSALMAN)—		
Field labourers, wood cutters, etc. .. .	7	1	III.—INDUSTRIES	978	25
Raisers of livestock, etc.	5	1	IV.—TRANSPORT	2	..
Others	7	35	DAGI AND KOLI (HINDU)—		
III.—INDUSTRIES	70	16	I.—EXPLOITATION OF ANIMALS AND VEGETATION	56	46
IV.—TRANSPORT	98	..	Cultivators of all kinds	46	57
V.—TRADE	192	2	Field labourers, wood cutters, etc. .. .	6	6
VI.—PUBLIC FORCE	35	..	Others	4	..
VII.—PUBLIC ADMINISTRATION	58	..	III.—INDUSTRIES	245	52
VIII.—ARTS AND PROFESSIONS	160	35	IV.—TRANSPORT	249	7
Religion	120	47	V.—TRADE	34	22
Other	40	7	X.—DOMESTIC SERVICE	133	1
			XII.—LABOURERS UNSPECIFIED	215	27
			OTHERS	68	5

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.		CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	
	Number of males.	Number of females.		Number of males.	Number of females.
1	2	3	1	2	3
FAQIR (MUSALMAN)—			KHATHRI (HINDU)—concluded.		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	312	3	VII.—PUBLIC ADMINISTRATION	50	
Cultivators of all kinds	196	12	VIII.—ARTS AND PROFESSIONS	56	3
Field labourers, wood cutters, etc.	113	5	IX.—PERSONS LIVING ON THEIR INCOME	47	25
Others	3		X.—DOMESTIC SERVICE	47	18
III.—INDUSTRIES	53	38	OTHERS	16	53
IV.—TRANSPORT	35				
XII.—LABOURERS UNSPECIFIED	35		KUMHAR (HINDU)—		
XIII.—BEGGARS, PROSTITUTES, CRIMINALS AND INMATES OF JAILS AND ASYLUMS	557	15	I.—EXPLOITATION OF ANIMALS AND VEGETATION	34	17
OTHERS	8	17	Cultivators of all kinds	10	3
			Field labourers, wood cutters, etc.	19	31
			Others	5	
			III.—INDUSTRIES	705	13
			IV.—TRANSPORT	180	3
			V.—TRADE	33	7
			X.—DOMESTIC SERVICE	16	12
			XII.—LABOURERS UNSPECIFIED	23	16
			OTHERS	9	25
GUJJAR (HINDU)—					
I.—EXPLOITATION OF ANIMALS AND VEGETATION	809	5	LOHAR (HINDU)—		
Cultivators of all kinds	778	6	I.—EXPLOITATION OF ANIMALS AND VEGETATION	203	12
Field labourers, wood cutters, etc.	9		Income from rent of land	3	
Raisers of livestock, etc.	17		Cultivators of all kinds	124	11
Others	5		Field labourers, wood cutters, etc.	73	13
III.—INDUSTRIES	22	35	Others	3	
IV.—TRANSPORT	82	7	III.—INDUSTRIES	665	4
V.—TRADE	17		IV.—TRANSPORT	46	
XII.—LABOURERS UNSPECIFIED	21	6	X.—DOMESTIC SERVICE	30	12
OTHERS	49		OTHERS	56	9
JAT (HINDU)—			MACHHI (MUSALMAN)—		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	893	4	III.—INDUSTRIES	50	
Cultivators of all kinds	887	1	IV.—TRANSPORT	128	
Others	6	3	X.—DOMESTIC SERVICE	773	5
III.—INDUSTRIES	18	6	OTHERS	51	4
IV.—TRANSPORT	14	1			
V.—TRADE	14	7	MALI (HINDU)—		
VI.—PUBLIC FORCE	41		I.—EXPLOITATION OF ANIMALS AND VEGETATION	398	13
OTHERS	20	15	Cultivators of all kinds	337	11
			Field labourers, wood cutters, etc.	41	51
			Others	20	
JHIWAR (HINDU)—			III.—INDUSTRIES	162	7
I.—EXPLOITATION OF ANIMALS AND VEGETATION	73	4	IV.—TRANSPORT	84	11
Income from rent of land	2		V.—TRADE	139	22
Cultivators of all kinds	62	1	X.—DOMESTIC SERVICE	57	14
Others	9	2	XII.—LABOURERS UNSPECIFIED	111	12
III.—INDUSTRIES	119	27	OTHERS	49	10
IV.—TRANSPORT	220	1			
V.—TRADE	146	4	MEO (MUSALMAN)—		
X.—DOMESTIC SERVICE	352	32	I.—EXPLOITATION OF ANIMALS AND VEGETATION	457	1
XII.—LABOURERS UNSPECIFIED	28	5	Cultivators of all kinds	457	1
OTHERS	62		III.—INDUSTRIES	205	9
			IV.—TRANSPORT	143	8
JULAHA (HINDU)—			V.—TRADE	35	19
I.—EXPLOITATION OF ANIMALS AND VEGETATION	32	17	VI.—PUBLIC FORCE	33	
Cultivators of all kinds	16		X.—DOMESTIC SERVICE	28	11
Others	16	2	XII.—LABOURERS UNSPECIFIED	65	
III.—INDUSTRIES	520	33	OTHERS	34	9
IV.—TRANSPORT	148	6			
V.—TRADE	28	11	MOGHAL (MUSALMAN)—		
VIII.—ARTS AND PROFESSIONS	32	25	I.—EXPLOITATION OF ANIMALS AND VEGETATION	73	
X.—DOMESTIC SERVICE	23	9	Cultivators of all kinds	63	
XII.—LABOURERS UNSPECIFIED	199	18	Others	10	
OTHERS	18	64	III.—INDUSTRIES	385	5
			IV.—TRANSPORT	70	1
KHATHRI (HINDU)—			V.—TRADE	153	
I.—EXPLOITATION OF ANIMALS AND VEGETATION	22	2	VI.—PUBLIC FORCE	39	
Cultivators of all kinds	19	5	VII.—PUBLIC ADMINISTRATION	42	
Field labourers, wood cutters, etc.	2		IX.—PERSONS LIVING ON THEIR INCOME	124	29
Others	1		X.—DOMESTIC SERVICE	47	32
III.—INDUSTRIES	87	14	OTHERS	67	43
IV.—TRANSPORT	93	1			
V.—TRADE	582	4			

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes—continued.

CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of workers per 100 males.	CASTE AND OCCUPATION.	Number per 1,000 workers engaged in each occupation.	Number of workers per 100 males.
1	2	3	1	2	3
NAI (HINDU)—			SANSI (HINDU)— concluded.		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	47	1	VI.—PUBLIC FORCE	48	..
Cultivators of all kinds	39	1	VII.—PUBLIC ADMINISTRATION	32	..
Others	8	..	X.—DOMESTIC SERVICE	24	..
III.—INDUSTRIES	84	19	XII.—LABOURERS UNSPECIFIED	210	..
IV.—TRANSPORT	23	..	XIII.—BEGGARS, PROSTITUTES, CRIMINALS AND INMATES OF JAILS AND ASYLUMS	48	..
V.—TRADE	20	14	OTHERS	10	..
X.—DOMESTIC SERVICE	40	9			
OTHERS	29	31			
PATHAN (MUSALMAN)—			SAYAD (MUSALMAN)—		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	146	1	I.—EXPLOITATION OF ANIMALS AND VEGETATION	57	6
Cultivators of all kinds	140	1	Income from rent of land	3	30
III.—INDUSTRIES	333	4	Cultivators of all kinds	53	5
IV.—TRANSPORT	89	1	Others	1	..
V.—TRADE	156	..	III.—INDUSTRIES	347	5
VI.—PUBLIC FORCE	52	..	IV.—TRANSPORT	86	1
VII.—PUBLIC ADMINISTRATION	43	..	Labourers and other workmen	73	1
IX.—PERSONS LIVING ON THEIR INCOME	22	14	Others	13	4
X.—DOMESTIC SERVICE	75	18	V.—TRADE	212	..
XIII.—BEGGARS, PROSTITUTES, ETC.	28	21	VI.—PUBLIC FORCE	50	..
OTHERS	56	5	VII.—PUBLIC ADMINISTRATION	24	..
			VIII.—ARTS AND PROFESSIONS	101	2
QURESHI (MUSALMAN)—			Religion	66	..
III.—INDUSTRIES	494	7	Lawyers, doctors, etc.	23	5
IV.—TRANSPORT	74	..	Others	12	4
V.—TRADE	256	9	IX.—PERSONS LIVING ON THEIR INCOME	32	29
VII.—PUBLIC ADMINISTRATION	26	..	X.—DOMESTIC SERVICE	53	16
IX.—PERSONS LIVING ON THEIR INCOME	24	67	OTHERS	38	3
X.—DOMESTIC SERVICE	42	44			
OTHERS	84	15	SHEIKH (MUSALMAN)—		
RAJPUT (HINDU)—			I.—EXPLOITATION OF ANIMALS AND VEGETATION	24	4
I.—EXPLOITATION OF ANIMALS AND VEGETATION	275	5	Cultivators of all kinds	23	4
Cultivators of all kinds	261	4	Others	1	..
Others	14	..	III.—INDUSTRIES	439	5
III.—INDUSTRIES	289	9	IV.—TRANSPORT	60	..
IV.—TRANSPORT	84	1	Labourers, boatmen, etc.	57	..
V.—TRADE	124	5	Others	3	..
VI.—PUBLIC FORCE	27	..	V.—TRADE	315	1
VII.—PUBLIC ADMINISTRATION	56	..	VII.—PUBLIC ADMINISTRATION	16	..
X.—DOMESTIC SERVICE	64	5	VIII.—ARTS AND PROFESSIONS	22	4
XII.—LABOURERS UNSPECIFIED	38	28	X.—DOMESTIC SERVICE	60	21
OTHERS	41	26	XII.—LABOURERS UNSPECIFIED	15	8
			XIII.—BEGGARS, PROSTITUTES, ETC.	16	45
RAJPUT (MUSALMAN)—			OTHERS	33	18
I.—EXPLOITATION OF ANIMALS AND VEGETATION	415	3	SUNAR (HINDU)—		
Cultivators of all kinds	413	30	III.—INDUSTRIES	923	8
III.—INDUSTRIES	99	3	IV.—TRANSPORT	18	..
IV.—TRANSPORT	169	..	V.—TRADE	20	..
V.—TRADE	46	..	OTHERS	39	67
VI.—PUBLIC FORCE	148	..			
VII.—PUBLIC ADMINISTRATION	41	..	TARKHAN (HINDU)—		
X.—DOMESTIC SERVICE	32	2	I.—EXPLOITATION OF ANIMALS AND VEGETATION	53	35
OTHERS	50	19	Cultivators of all kinds	40	45
SAINI (HINDU)—			Field labourers, wood cutters, etc.	10	9
I.—EXPLOITATION OF ANIMALS AND VEGETATION	906	17	Others	3	..
Cultivators of all kinds	766	7	III.—INDUSTRIES	788	2
Field labourers, wood cutters, etc.	110	351	IV.—TRANSPORT	60	..
Others	30	..	V.—TRADE	13	..
IV.—TRANSPORT	16	..	X.—DOMESTIC SERVICE	25	..
XII.—LABOURERS UNSPECIFIED	30	..	XII.—LABOURERS UNSPECIFIED	39	77
OTHERS	48	9	OTHERS	24	4
SANSI (HINDU)—			TELI (MUSALMAN)—		
I.—EXPLOITATION OF ANIMALS AND VEGETATION	48	..	I.—EXPLOITATION OF ANIMALS AND VEGETATION	129	..
Cultivators of all kinds	48	..	Cultivators of all kinds	127	..
III.—INDUSTRIES	419	33	Others	2	..
IV.—TRANSPORT	161	5	III.—INDUSTRIES	746	10
			IV.—TRANSPORT	49	..

(OCCUPATIONAL)—SUBSIDIARY TABLE VIII.

Occupations of selected castes *concluded.*

CASTE AND OCCUPATION.			CASTE AND OCCUPATION.		
1	2	3	1	2	3
TELI (MUSALMAN)— <i>concluded.</i>			ANGLO-INDIANS.		
V.—TRADE	23	..	III.—INDUSTRIES	11	..
XII.—LABOURERS UNSPECIFIED	30	..	IV.—TRANSPORT	217	17
OTHERS	23	38	Owners, managers, ship's officers, etc.	211	19
EUROPEANS—			Labourers, boatmen, etc.	6	..
IV.—TRANSPORT	45	6	VII.—PUBLIC ADMINISTRATION	377	19
Owners, managers, ship's officers, etc.	28	11	Gazetted officers	33	..
Labourers, boatmen, etc.	17	..	Others	344	22
VI.—PUBLIC FORCE	738	..	VII.—ARTS AND PROFESSIONS	250	350
Commissioned and Gazetted Officers	87	..	X.—DOMESTIC SERVICE	89	7
Others	651	..	OTHERS	56	67
VII.—PUBLIC ADMINISTRATION	74	14	ARMENIANS—		
Gazetted officers	20	..	IV.—TRANSPORT	400	..
Others	54	20	Owners, managers, ship's officers, etc.	333	..
VIII.—ARTS AND PROFESSIONS	50	162	Labourers, boatmen, etc.	67	..
Religion	2	400	V.—TRADE	67	..
Lawyers, doctors, etc.	25	144	VI.—PUBLIC FORCE	167	..
Others	23	175	VII.—PUBLIC ADMINISTRATION	166	..
OTHERS	93	25	VIII.—ARTS AND PROFESSIONS	133	..
			IX.—PERSONS LIVING ON THEIR INCOME	67	..

(OCCUPATIONAL)—SUBSIDIARY TABLE IX.

Number of persons employed on the 18th March 1921 on Railways and in the Irrigation Department in the Punjab and Delhi.

Class of persons employed.				Europeans and Anglo-Indians.	Indians.	REMARKS.
1				2	3	4
RAILWAYS.						
TOTAL PERSONS EMPLOYED	..	..	{ Punjab ..	2,077	83,787	
Persons directly employed—			{ Delhi ..	25	3,033	
Officers			{ Punjab ..	102	33	
			{ Delhi ..	7	..	
Subordinates drawing more than Rs. 75 p. m.			{ Punjab ..	1,049	2,476	One Indian on leave. 21 Indians on leave.
			{ Delhi ..	18	49	
„ „ from Rs. 20 to Rs. 75 p. m.			{ Punjab ..	411	31,686	
			{ Delhi ..	..	722	
„ „ under Rs. 20 p. m.			{ Punjab ..	512	38,550	
			{ Delhi ..	..	2,041	
Persons indirectly employed—						
Contractors			{ Punjab ..	2	388	
			{ Delhi ..	..	19	
Contractors' regular employees			{ Punjab ..	1	1,844	
			{ Delhi ..	..	13	
Coolies			{ Punjab ..	..	8,832	
			{ Delhi ..	..	189	
IRRIGATION DEPARTMENT.						
TOTAL PERSONS EMPLOYED	..	..	..	114	46,079	
Persons directly employed—						
Officers .. .. .			..	88	133	
Upper subordinates .. .. .			..	1	256	
Lower subordinates .. .. .			..	1	2,698	
Clerks .. .. .			..	26	1,409	
Peons and other servants .. .. .			..	..	9,067	
Coolies .. .. .			..	..	3,305	
Persons indirectly employed—						
Contractors .. .. .			..	..	1,582	
Contractors' regular employees .. .. .			..	..	2,168	
Coolies .. .. .			..	..	25,461	

(OCCUPATIONAL)—SUBSIDIARY TABLE IX-A.

Number of persons employed in the Post Office and Telegraph Department on the 18th March 1921 in the Punjab and Delhi.

Class of persons employed.	POST OFFICE.		TELEGRAPH DEPARTMENT.		REMARKS.
	Europeans and Anglo-Indians.	Indians.	Europeans and Anglo-Indians.	Indians.	
1	2	3	4	5	6
(1) POSTS AND TELEGRAPHS.					
TOTAL PERSONS EMPLOYED	35	11,140	336	962	
Supervising officers (including probationary superintendents and inspectors of post offices and assistant and deputy superintendents of telegraphs and all officers of higher rank than these)	10	58	8	..	
Postmasters including deputy, assistant, sub and branch postmasters	11	897	..	..
Signalling establishment including warrant officers, non-commissioned officers, military telegraphists and other employees .. .. .	..	..	326	309	
Miscellaneous agents, schoolmasters, station masters, etc. .. .. .	..	2,039	..	..
Clerks of all kinds	14	1,957	2	144	
Postmen .. .. .	..	3,418	..	..
Unskilled labour establishment including line coolies, cable guards, battery-men, telegraph messengers, peons and other employees .. .. .	..	657	..	509	
Road establishment consisting of overseers, runners, clerks and booking agents, boatmen, syces, coachmen, bearers and others .. .. .	..	2,114	..	..
(2) RAILWAY MAIL SERVICE.					
TOTAL PERSONS EMPLOYED .. .. .	..	970	..	..
Supervising officers (including superintendents and inspectors of sorting) .. .. .	..	21	..	..
Clerks of all kinds .. .. .	..	10	..	..
Sorters .. .. .	..	543	..	..
Mail guards, mail agents, van peons, porters, etc. .. .. .	..	391	..	..

I. Distribution of industries and persons employed. II. Particulars of establishments employing 20 or more persons in 1921 and 1911. III. Organisation of establishments. IV. Place of origin of skilled employees. V. Place of origin of unskilled labourers. VI. Distribution of certain races in certain industrial establishments. VII. Proportional distribution of adult women and of children of each sex in different industries. VIII. Distribution of power.

(INDUSTRIAL)—SUBSIDIARY TABLE I.

Distribution of industries and persons employed.

GENERAL DISTRIBUTION OF INDUSTRIES AND PERSONS EMPLOYED.																
Industrial Establishments.	Total number of establishments.	Districts and States where chiefly located.	NUMBER OF PERSONS EMPLOYED.												Number of adult females employed per 1,000 adult males.	Number of children of both sexes employed per 1,000 adults.
			Total.	DIRECTION, SUPERVISION AND CLERICAL.				Skilled workmen.	UNSKILLED LABOURERS.							
				Males.	Females.	Males.	Females.		Males.	Females.	Males.	Females.				
													Males.	Females.			Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PUNJAB	763		57,019	4,217	312	5	2,139	..	28,865	775	23,391	2,852	2,312	585	66	50
1. Growing of special products.	34	Kangra, Mandi State ..	1,726	303	7	1	82	..	320	9	1,041	224	276	69	161	205
Tea factories	34	Kangra, Mandi State	1,726	303	7	1	82	..	320	9	1,041	224	276	69	161	205
2. Mines	17	Jhelum, Shahpur, Attock	3,355	72	21	..	61	..	1,420	28	1,788	37	65	7	20	21
COAL MINES	8	Jhelum ..	1,879	7	1	..	27	..	764	..	1,052	7	35	..	4	19
SALT MINES	4	Jhelum ..	675	49	3	..	9	..	509	26	152	19	2	4	67	8
3. Quarries of hard rocks.	23	Jhelum, Mandi State, Kangra.	1,264	185	3	..	35	..	377	48	755	96	94	41	123	103
4. Textile and connected industries.	203	Lahore, Amritsar, Gurdaspur, Montgomery, Multan, Nabha State, Shahpur, Patiala State, Ludhiana.	11,804	1,731	34	..	583	..	5,160	83	5,433	1,548	594	100	145	54
COTTON GINNING AND PRESSING.	164	Lahore, Amritsar, Montgomery, Lyallpur, Multan, Nabha State.	7,266	1,595	3	..	413	..	2,167	34	4,454	1,464	229	97	213	38
WOOLLEN MILLS	3	Lahore, Amritsar, Gurdaspur.	1,888	74	28	..	70	..	928	..	806	71	56	3	39	31
CARPET FACTORIES	12	Amritsar, Gurdaspur ..	1,429	2	1	..	53	..	1,076	2	66	..	233	..	2	194
5. Leather industries	15	Lahore, Gujranwala ..	418	9	..	..	24	..	273	9	109	..	12	..	22	29
6. Wood industries	7	Lahore ..	538	..	2	..	13	..	278	..	221	..	24	..	..	47
7. Metal industries	35	Gurdaspur, Lahore, Amritsar, Sialkot, Rawalpindi.	3,233	2	79	1	161	..	1,178	1	1,562	..	253	..	1	85
IRON WORKS	14	Lahore, Amritsar, Sialkot.	1,099	2	13	1	61	..	574	1	362	..	89	..	2	88
8. Glass and earthenware industries.	4	Ambala, Lahore, Amritsar, Rawalpindi.	249	9	..	..	14	..	37	..	120	7	78	2	41	449
9. Industries connected with chemical products.	13	Amritsar, Lahore, Mianwali, Bahawalpur State.	222	15	..	..	24	..	87	1	104	11	7	3	56	44
10. Food industries	112	Ferozepore, Amritsar, Lahore, Shahpur, Patiala State, Bahawalpur State, Montgomery.	4,530	132	42	..	287	..	1,168	1	2,865	126	168	5	29	30
FLOUR MILLS	127	Shahpur, Amritsar, Patiala State, Lahore.	4,174	418	8	..	298	..	1,323	22	2,400	372	145	24	98	38
11. Industries of dress	9	Ludhiana ..	520	..	3	..	34	..	393	..	59	..	31	..	..	63
12. Furniture industries	8	Gujrat ..	305	..	1	..	19	..	206	..	66	..	13	..	..	45
13. Industries connected with buildings.	180	Lahore, Amritsar, Rohatak, Ambala, Hoshiarpur, Ludhiana, Gujrat, Rawalpindi, Shahpur, Patiala State.	6,238	1,753	..	..	287	..	2,917	593	2,445	802	589	358	247	134
BRICK KILNS	161	Lahore, Amritsar, Rohatak, Ambala, Hoshiarpur, Ludhiana, Gujrat, Rawalpindi, Shahpur, Patiala State.	5,953	1,700	..	..	258	..	2,841	593	2,278	754	576	353	251	138
14. Construction of means of transport	28	Ambala, Lahore, Rawalpindi, Bahawalpur, State, Patiala State.	17,228	2	75	1	284	..	11,272	1	5,582	..	15	..	..	1
RAILWAY WORKSHOPS	19	Ambala, Lahore, Rawalpindi, Bahawalpur State.	16,864	..	51	..	246	..	11,080	..	5,480	..	7	..	..	..

(INDUSTRIAL)—SUBSIDIARY TABLE I.

Distribution of industries and persons employed—concluded.

GENERAL DISTRIBUTION OF INDUSTRIES AND PERSONS EMPLOYED.																
Industrial Establishments.	Total number of establishments.	Districts and States where chiefly located.	NUMBER OF PERSONS EMPLOYED.												Number of adult females employed per 1,000 adult males.	Number of children of both sexes employed per 1,000 adults.
			Total.		DIRECTION, SUPERVISION AND CLERICAL.				Skilled workmen.		UNSKILLED LABOURERS.					
					Europeans and Anglo-Indians.		Indians.				Adults.		Children.			
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PUNJAB—concluded.																
15. Production, application and transmission of physical forces, ELECTRIC POWER HOUSE.	15	Rawalpindi, Lahore, Ludhiana.	1,376	1	25	..	82	..	651	1	618	..	..	..	1	..
16. Industries of Luxury. PRINTING PRESS ..	8	Lahore	1,215	1	25	..	66	..	591	1	533	..	..	..	1	..
	60	Ambala, Simla, Lahore, Amritsar, Sialkot.	4,013	3	20	2	149	..	3,128	..	623	1	93	..	1	24
	42	Ambala, Simla, Lahore, Amritsar.	3,206	2	20	2	97	..	2,468	..	552	..	69	..	1	22
DELHI																
	38	DELHI	4,752	538	46	..	201	..	2,787	133	1,518	324	200	81	100	56
1. Quarries of hard rocks.	1		703	14	1	..	..	..	513	..	184	14	5	..	20	7
2. WOOD INDUSTRIES	1		123	..	2	..	9	..	80	..	30	..	2	..	..	17
3. METAL INDUSTRIES	2		91	..	1	..	1	..	45	..	36	..	8	..	..	96
4. Glass and earthenware industries.	3		68	15	..	..	5	..	32	..	27	13	4	2	203	78
5. Industries connected with chemical products.	1		35	..	2	..	8	..	10	..	15	..	..	..	..	..
6. Food industries	3		128	..	3	..	2	..	71	..	52	..	..	..	..	..
7. Furniture industries.	1		29	..	..	..	3	..	21	..	4	..	1	..	..	36
8. Industries connected with buildings.	19		1,912	505	17	..	65	..	905	132	757	295	168	78	245	113
9. Construction of means of transport.	17		1,538	500	1	..	17	..	789	132	575	290	156	78	305	130
10. Production, application and transmission of physical forces.	4		581	1	14	..	31	..	342	1	188	..	6	..	2	10
11. Industries of Luxury.	1		362	..	2	..	50	..	141	..	169	..	..	..	..	..
	2		720	3	4	..	27	..	627	..	56	2	6	1	3	10

(INDUSTRIAL)—SUBSIDIARY TABLE II.

Particulars of establishments employing 20 or more persons in 1921 and 1911.

Serial No.	ESTABLISHMENTS EMPLOYING 20 OR MORE PERSONS.	All industries.	Growing of special products.	Mines.	Quarries of hard rocks.	Textile and connected industries.	Leather industries.	Wood industries.	Metal industries.	Glass and earthenware industries.	Industries connected with chemical products.	Food industries.	Industries of dress.	Furniture industries.	Industries connected with buildings.	Construction of means of transport.	Production, application, transmission of physical forces.	Industries of luxury.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
PUNJAB & DELHI.																			
	TOTAL ESTABLISHMENTS.	{ 1921 413	538 41	23 10	17 10	20 5	154 104	10 3	5 1	19 37	7 2	3 4	50 61	5 10	6 4	141 97	27 24	11 6	40 34
(i)	Directed by Government or Local Authorities.	{ 1921 1911	93 58	2 ..	5 3	13 3	4 ..	.. ..	2 ..	5 12	.. ..	.. 8	20 ..	1 ..	.. 1	9 5	20 18	7 2	5 6
(ii)	Directed by Registered Companies	{ 1921 1911	40 43	.. 1	3 1	1 1	6 20	.. ..	2 ..	2 2	1 ..	1 12	4 ..	.. ..	6 2	4 1	3 3	7 ..	
(iii)	Owned by Private Persons—																		
(A)	Europeans or Anglo-Indians.	{ 1921 1911	17 30	1 8	2 ..	.. ..	2 1	.. ..	.. 2	.. ..	.. ..	6 4	.. 8	.. ..	2 1	2 3	.. ..	2 ..	
(B)	Indians	{ 1921 1911	387 312	20 32	7 6	6 1	142 80	10 3	1 1	12 21	6 2	20 37	4 2	5 3	124 89	1 2	1 1	26 28	
(C)	Others	{ 1921 1911	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	.. ..	.. ..	.. ..	.. ..
A.—PUNJAB.																			
	NUMBER OF PERSONS EMPLOYED.	{ 1921 1911	57,153 45,532	1,851 3,914	3,427 2,757	1,403 2,250	12,759 8,312	352 102	495 ..	2,945 3,350	258 72	77 160	3,642 3,054	457 238	287 296	7,094 6,397	17,168 10,994	1,296 100	3,662 3,536
(a)	Direction, Supervision and Clerical.	{ 1921 1911	1,970 2,791	67 279	82 107	34 48	525 749	19 6	12 ..	198 356	14 9	5 25	201 307	30 10	15 10	196 193	353 199	95 6	124 487
(b)	Skilled workmen	{ 1921 1911	27,932 20,179	309 737	1,448 611	412 89	4,869 3,506	225 59	247 ..	1,010 1,666	37 40	36 25	829 582	348 185	181 254	3,248 2,045	11,232 7,927	624 57	2,877 2,396
(c)	Unskilled labourers	{ 1921 1911	27,251 22,562	1,475 2,898	1,897 2,039	957 2,113	7,365 4,057	108 37	236 ..	1,737 1,328	207 23	36 110	2,612 2,165	79 43	71 32	3,650 4,169	5,583 2,868	577 37	661 653
(d)	Adult women per 1,000 adult men.	{ 1921 1911	125 129	219 124	21 291	132 17	297 205	.. ..	.. ..	.. ..	58 ..	185 119	48 59	.. ..	.. ..	362 230	.. ..	.. ..	2 ..
(e)	Children of both sexes per 1,000 adult	{ 1921 1911	112 127	280 270	39 95	164 26	99 132	125 ..	113 ..	151 100	630 533	125 170	61 46	386 1,529	109 455	333 251	2 11	.. 57	148 144
B.—DELHI.																			
	NUMBER OF PERSONS EMPLOYED.	{ 1921 1911	5,271 3,792	.. ..	.. ..	717 ..	.. 1,988	.. ..	123 46	91 350	83 ..	85 ..	128 660	.. 31	29 ..	2,398 147	582 165	362 812	728 98
(a)	Direction, Supervision and Clerical.	{ 1921 1911	246 293	.. ..	.. ..	1 ..	.. 98	.. ..	11 1	2 40	15 ..	10 ..	5 95	.. 1	3 ..	81 2	45 6	52 41	31 9
(b)	Skilled workmen	{ 1921 1911	2,915 2,009	.. ..	.. ..	513 ..	.. 1,387	.. ..	80 10	45 181	32 ..	10 ..	71 136	.. 30	21 ..	1,032 23	343 106	141 96	627 40
(c)	Unskilled labourers	{ 1921 1911	2,110 1,490	.. ..	.. ..	203 ..	.. 503	.. ..	32 35	44 129	46 ..	15 ..	52 429	.. ..	5 ..	1,285 122	194 53	169 175	65 44
(d)	Adult women per 1,000 adult men.	{ 1921 1911	212 126	.. ..	.. ..	76 ..	.. 271	.. ..	.. ..	.. ..	203 ..	.. ..	.. 12	.. ..	.. ..	387 705	.. ..	.. 131	36 30
(e)	Children of both sexes per 1,000 adult.	{ 1921 1911	151 199	.. ..	.. ..	.. ..	.. 306	.. ..	67 ..	222 173	.. 78	.. ..	.. 39	.. ..	250 ..	232 627	32 ..	.. 12	121 294

(INDUSTRIAL)—SUBSIDIARY TABLE III.

Organization of Establishments.

TYPE OF ORGANIZATION.	INDUSTRIAL ESTABLISHMENTS.																		REMARKS.
	Total establishments.	Growing of special products.	Mines.	Quarries of hard rocks.	Textile and connected industries.	Leather industries.	Wood industries.	Metal industries.	Glass and earthenware industries.	Industries connected with chemical products.	Food industries.	Industries of dress.	Furniture industries.	Industries connected with buildings.	Construction of means of transport.	Production, application and transmission of physical forces.	Industries of luxury.		
PUNJAB.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1. UNDER THE LOCAL GOVERNMENT OR LOCAL AUTHORITY	102	2	5	16	5	1	4	..	..	124	1	..	10	21	7	5		
2. REGISTERED COMPANIES ..	38	..	3	1	10	..	2	2	1	..	4	..	4	2	3	6			
(a) With European or Anglo-Indian Directors.	9	..	2	1	3	..	..	..	..	..	2	..	..	..	..	1		
(b) With Indian Directors ..	20	..	1	..	6	..	1	2	1	..	2	..	3	..	..	4		
(c) With Directors of different races.	9	..	..	..	1	..	1	..	..	..	..	..	1	2	3	1		1 factory, column No. 6, directed by Europeans and Indians. 1 factory, column No. 8, directed by Europeans and Indians. 1 factory, column No. 15, directed by Anglo-Indians and Indians. 2 factories, column No. 16, directed by Europeans and Indians. 3 factories, column No. 17, directed by Europeans and Indians. 1 factory, column No. 18, directed by Indians and Europeans.
3. PRIVATELY OWNED ..	623	32	9	6	188	15	4	29	3	1284	8	8	166	5	549				
(a) By Europeans and Anglo-Indians.	18	1	2	..	2	..	..	..	..	6	..	1	4	..	2			
(b) By Indians ..	603	31	7	6	*184	15	4	29	3	1278	8	8	165	1	547			* One factory has two owners, one Khatri and one Shoikh.	
(c) By joint owners of different races.	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	2 factories, column No. 6, directed by Japanese and Chinese.
DELHI.																			
1. UNDER THE LOCAL GOVERNMENT OR LOCAL AUTHORITY.	9	..	..	1	..	..	1	1	..	..	2	..	..	2	1	1		
2. REGISTERED COMPANIES ..	6	..	..	..	..	..	..	..	..	1	..	..	2	2	..	1		
(a) With European or Anglo-Indian Directors.	2	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
(b) With Indian Directors ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(c) With Directors of different races.	4	..	..	..	..	..	..	..	..	1	..	..	..	2	..	1		1 factory, column No. 11, directed by Europeans and Indians. 2 factories, column No. 16, directed by Europeans and Indians. 1 factory, column No. 18, directed by Anglo-Indians and Indians.
3. PRIVATELY OWNED ..	23	..	..	..	..	..	1	3	..	1	..	1	17	..	..	..
(a) By Europeans and Anglo-Indians.	2	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..
(b) By Indians ..	20	..	..	..	..	..	1	3	..	..	..	..	16	..	..	..
(c) By joint owners of different races.	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..		1 factory, column No. 14, directed by Chinese.

(INDUSTRIAL) SUBSIDIARY TABLE VI.

Distribution of certain Races in certain Industrial Establishments.

(INDUSTRIAL)—SUBSIDIARY TABLE VI.

Distribution of certain Races in certain Industrial Establishments.

INDUSTRIAL ESTABLISHMENTS.

RACE OR CASTE.	Total.	Dyeing of special pro-ducts.		Miners.		Quarries of hard rock.		Textile and connected industries.		Leather industries.		Wood industries.		Metal industries.		Glass and earthenware industries.		Industries connected with chemical products.		Food industries.		Industries of dress.		Furniture industries.		Industries connected with buildings.		Construction of means of transport.		Production, application of physical forces.		Industries of luxury.		REMARKS.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
1		2	3	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
PUNJAB.																																			
TOTAL EUROPEANS AND ANGLO-INDIANS.	604	10	7	24	2	3		40	1			2		82	2					59		3		2				322	2	29		31	2		
Number employed as —																																			
(a) Managers ..	76		5	8		2		5				1		3						18		1						22		5		6			
(b) Supervising Staff ..	131	1	1	13		1		17				1		18						21		2		1				16	1	20		10			
(c) Clerical Staff ..	85	4	1					12						58	1					3								7				4	2		
(d) Skilled workmen ..	292	5		3	2			6	1					3	1					17				1				247	1	4		11			
DELHI.																																			
TOTAL EUROPEANS AND ANGLO-INDIANS.	71					1						2		1				3		3						19		24		2		16			
Number employed as —																																			
(a) Managers ..	16											1		1				1		3						3		3		1		2			
(b) Supervising Staff ..	27											1						1								12		10		1		2			
(c) Clerical Staff ..	3																										1								
(d) Skilled workmen ..	25																	1								2		10				12			

(INDUSTRIAL)—SUBSIDIARY TABLE VII.

Proportional distribution of adult women and of children of each sex in different Industries.

WOMEN AND CHILDREN.		PRINCIPAL INDUSTRIES OF EMPLOYMENT.															
		Total number employed.	Tea factories.	Stone quarries.	Cotton ginning and pressing.	Woollen mills.	Iron works.	Glass works.	Pottery works.	Saltpetre refineries.	Flour mills.	Dairy farms.	Tailoring establishments.	Hosiery works.	Brick kiln.	Printing press.	REMARKS.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PUNJAB.																	
Adult women	..	1,000	64	29	412	20	1	2	..	3	108	6	..	..	371	1	
Children	..	1,000	119	31	112	20	31	28	..	3	58	15	5	6	321	24	
Male	..	798	95	21	79	19	31	27	..	2	50	14	5	6	199	24	
Female	..	202	24	10	33	1	..	1	..	1	8	1	..	..	122	..	
DELHI.																	
Adult women	..	1,000	..	31	..	..	..	..	28	..	..	..	..	..	923	..	
Children	..	1,000	..	18	..	..	..	..	21	..	..	..	..	..	833	..	
Male	..	..	..	18	..	..	..	..	14	..	..	..	..	..	555	..	
Female	..	..	..	..	..	..	..	..	7	..	..	..	..	..	278	..	

(INDUSTRIAL)—SUBSIDIARY TABLE VIII.

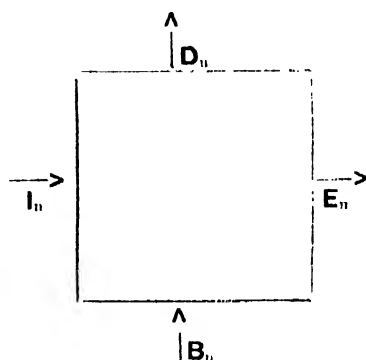
Distribution of Power.

TYPE OF POWER USED.		INDUSTRIAL ESTABLISHMENTS.																	REMARKS.	
		Total establishments.	Growing of special products.	Mines.	Quarries.	Textile and connected industries.	Leather industries.	Wood industries.	Metal industries.	Glass and earthenware industries.	Industries connected with chemical products.	Food industries.	Industries of dress.	Furniture industries.	Industries connected with buildings.	Construction of means of transport.	Production, application and transmission of physical forces.	Industries of luxury.		
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
PUNJAB.																				
STEAM	..	289	15	8	..	157	4	2	5	1	..	62	..	1	13	6	8	7	* Includes 12 factories using steam and electricity oil, as follows :— (a) Col. No. 6 six establishments. (b) Col. No. 8 one establishment. (c) Col. No. 12 two establishments. (d) Col. No. 16 two establishments. (e) Col. No. 17 one establishment.	
OIL	..	66	..	1	..	12	2	1	9	1	..	26	..	..	6	1	1	6		
WATER	..	16	..	..	..	..	..	..	..	..	..	16	..	..	..	..	..	..
GAS	..	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
ELECTRICITY	..	53	..	..	..	6	..	8	4	..	..	4	1	1	2	9	7	16		
(a) Generated to the premises.	..	13	..	..	..	3	..	1	..	..	..	2	..	..	..	1	6	..		
(b) Supplied from without	..	40	..	..	..	3	..	2	4	..	..	2	1	1	2	8	1	16		
DELHI.																				
STEAM	..	9	..	..	..	..	..	..	..	2	1	2	..	..	2	1	..	1		
OIL	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
WATER		
GAS	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
ELECTRICITY	..	6	..	..	..	..	1	..	..	..	..	1	..	..	..	2	1	1		
(a) Generated to the premises.	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..		
(b) Supplied from without	..	5	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	1		

APPENDIX 1.

THE ERROR IN VITAL STATISTICS AS DETERMINED FROM CENSUS ENUMERATIONS, ON A PROBABLE HYPOTHESIS AS TO THE ERRORS OF THE CENSUS.

Let us call the number of persons recorded as immigrants at any census as I'_n , where n is the year of the Census. We will call the recorded number of emigrants E'_n .



Let I_n be the number of immigrants in the n th year.

E_n „ „ emigrants „ „
 B_n „ „ births „ „
 D_n „ „ deaths „ „

Then if the inter-censal rise in population is R ,

$$R = \text{Sum } (I_n + B_n - E_n - D_n) \\ B - D = R - n(I - E). \quad (I)$$

provided that I_n and E_n are constant throughout the decade and equal to I and E respectively.

Now assume migrants enter at the mid-point of the year, we have

$$I'_{n+10} = I'_n s^{10} + I_{n+1} s^{\frac{11}{2}} + I_{n+2} s^{\frac{13}{2}} + \dots + I_{n+10} s^{\frac{1}{2}}$$

where s is equal to the proportion of survivors after one year, and assuming a constant death-rate.

Hence

$$I'_{n+10} = I'_n s^{10} + s^{\frac{1}{2}} (I_{n+1} + s I_{n+2} + \dots + s^9 I_{n+10})$$

assuming that immigration is constant from year to year and equal to I per annum.

$$I'_{n+10} = I'_n s^{10} + I s^{\frac{1}{2}} \frac{s^{10} - 1}{s - 1} \\ \text{or } I = \frac{s^{10} - 1}{s^{\frac{1}{2}} (s^{10} - 1)} (I'_{n+10} - I'_n s^{10}). \quad (II)$$

Similarly

$$E'_{n+10} = E'_n s^{10} + E_{n+1} s^{\frac{9}{2}} + E_{n+2} s^{\frac{7}{2}} + \dots + E_{n+10} s^{\frac{1}{2}}$$

assuming as before equal survival rates, and again assuming constant emigration,

$$E'_{n+10} = E'_n s^{10} + E s^{\frac{1}{2}} \frac{s^{10} - 1}{s - 1} \quad (III)$$

Where E is the annual rate of emigration.

$$\text{Thus } I - E = \frac{s - 1}{s^{\frac{1}{2}} (s^{10} - 1)} \left\{ I'_{n+10} - E'_{n+10} - s^{10} (I'_n - E'_n) \right\}$$

Call the inter-censal gain by migration M ,

$$\text{Then, } M = \frac{10(s-1)}{s^{\frac{1}{2}}(s^{10}-1)} \left\{ I'_{n+10} - E'_{n+10} - s^{10} (I'_n - E'_n) \right\} \quad (IV)$$

This result (IV) gives the calculated gain from migration from the number of persons recorded at each census as having been born inside a given area and enumerated outside it (E') and born outside it and enumerated inside it (I').

The assumption made of a survival proportional to the number of persons living at each age is probably not so true as the assumption of a definite constant decrement of population, especially between the ages of 36—76 (*vide* page 92, Census Report of England and Wales 1911). Call the annual decrement δ . Then our equations become

$$I'_{n+10} = I'_n (1-10\delta) + I_{n+1} (1-9\frac{1}{2}\delta) + I_{n+2} (1-8\frac{1}{2}\delta) + \dots + I_{n+10} (1-\frac{1}{2}\delta).$$

Writing as before

$$I_{n+1} = I_{n+2} = I_{n+3} = I_{n+4} = \dots = I \text{ for the annual immigration}$$

$$I'_{n+10} = I'_n (1-10\delta) + I (10-50\delta)$$

$$\text{therefore} \quad 10 I = \frac{I'_{n+10} - I'_n (1-10\delta)}{1-5\delta} \quad (\text{II A})$$

$$\text{and} \quad 10 E = \frac{E'_{n+10} - E'_n (1-10\delta)}{1-5\delta} \quad (\text{III A})$$

these equations give the total migration (emigration and immigration) during the decade. If we put $\delta = 20/1000 = 1/50$

$$10 I = (I'_{n+10} - I'_n 4/5) / (9/10) = 10/9 \cdot I'_{n+10} - 8/9 \cdot I'_n$$

$$= 1/9 (10 \cdot I'_{n+10} - 8 \cdot I'_n).$$

We have seen how an approximate calculation of the immigration and emigration during an inter-censal decade may be made, leading to formulae II and III based on a geometric decrease of population, and to formulae II A and III A based on an arithmetic decrease of population, with age (Middleton's assumption.)

Let us write the total immigration and emigration in a decade as i and e respectively, then if b and d are the true number of births and deaths and R the inter-censal rise in population

$$R = b + i - d - e$$

so that $b - d = R - (i - e)$ (IV)

Let B and D be the total number of inter-censal births and deaths from the records of vital statistics. Then in general the recorded number of births and deaths will be less than the true number of births and deaths, so that $b > B$ and $d > D$, and we may write

$$b = B + k \quad \text{and} \quad d = D + k',$$

where k and k' are both greater than zero.

Hence $k - k' = (b - d) - (B - D)$

Thus the error in $(B - D)$ is $k - k'$; but this alone gives us no information as to the error of B or D separately, and the deduction (made in para. 25 of Chapter I of the Report) that when $k - k'$ is positive k' is zero, and when $k - k'$ is negative k is zero, is not justified.

It is now necessary to re-examine the whole question from the point of view of the probable errors of the census returns.

For convenience let us write the total number of immigrants and emigrants during the decade as ' i ' and ' e ' respectively, and the immigrants and emigrants enumerated at the two censuses as i_0, i_1, e_0, e_1 . Then we have from the previous equations (II A and III A.)

$$i = \frac{i_1 - i_0 (1-10\delta)}{1-5\delta} = li_1 - mi_0$$

$$\text{and} \quad e = \frac{e_1 - e_0 (1-10\delta)}{1-5\delta} = le_1 - me_0$$

where $l = 1/(1-5\delta)$ and $m = (1-10\delta)/(1-5\delta)$, then

$$b - d = R - l(i_1 - e_1) + m(i_0 - e_0) \quad \text{from (IV).}$$

Call the excess of immigrants over the emigrants s_0, s_1 at the respective censuses.

$$b - d = R - ls_1 + ms_0$$

$$\text{or} \quad b - d = p_1 - p_0 - ls_1 + ms_0$$

Call θ_x the standard error of any variable x , then (r being the correlation between the errors in any pair of variables)

$$\theta_{b-d}^2 = \theta^2 p_1 + \theta^2 p_0 + l^2 \theta^2 s_1 + m^2 \theta^2 s_0 - 2r \theta p_1 \theta p_0 - 2r l \theta p_1 \theta s_1 + 2r m \theta p_1 \theta s_0 + 2r l \theta p_0 \theta s_1 - 2r m \theta p_0 \theta s_0 - 2l m r s_0 s_1 \theta s_0.$$

Let the proportionate standard errors be

v for p_0 and p_1

w for s_0 and s_1 ,

and let r be the same for all pairs of variables.

We assume that there is no error in l and m , so

$$\begin{aligned} 0_{-d}^2 = & v^2(p_0^2 + p_1^2) + w^2(l^2 s_1^2 + m^2 s_0^2) - 2rv^2(p_0 p_1) - 2rvw(l p_1 s_1) \\ & + 2rvwmp_1 s_0 + 2rvwlp_1 s_1 - 2rvwmp_1 s_0 - 2rlmw^2 s_1 s_0 \end{aligned}$$

where all the p 's and s 's are mean values.

$$\begin{aligned} \theta_{b-d}^2 = & v^2(p_0^2 + p_1^2 + 2rp_0 p_1) + w^2(l^2 s_1^2 + m^2 s_0^2 - 2rlms_0 s_1) \\ & - 2rvw(l p_1 s_1 - l p_1 s_0 - l p_0 s_1 + m p_1 s_0) \end{aligned}$$

Let us take a special case and put

$$p_0 = p_1 = p \text{ and } s_0 = s_1 = s$$

then

$$\begin{aligned} \theta_{b-d}^2 = & 2v^2 p^2 (1-r) + w^2 s^2 (l^2 + m^2 - 2rlm) - 2rvwps (l-m-l+m) \\ & - 2v^2 p^2 (1-r) + w^2 s^2 (l^2 + m^2 - 2rlm) \end{aligned}$$

Now we may write $\theta_{b-d}^2 = \theta_b^2 - \theta_d^2 = 2r' \theta_b \theta_d$ and $(r'$ being the correlation in assuming the error in the births and deaths are errors of the birth and death proportionate to their numbers figures.

$$\theta_{b-d}^2 = u^2 (b^2 + d^2 - 2r' b d)$$

where u is the proportionate error in b and d respectively

Putting in our special case $b=d$

$$\theta_{b-d}^2 = 2u^2 b^2 (1-r')$$

therefore

$$u^2 = v^2 \frac{p^2}{b^2} \cdot \frac{(1-r)}{(1-r')} + w^2 \frac{s^2}{b^2} \cdot \frac{(l^2 + m^2 - 2rlm)}{2(1-r')} \quad (V)$$

This formula gives the proportionate standard error in the birth and death return (u) in terms of the proportionate census standard errors (v), in the standard error of enumeration in emigrants and immigrants (w), in the correlations in errors of the various census returns (r) and in errors of registration of births and deaths (r')

In applying the result (v) difficulties arise owing to our ignorance of the probable errors of the census, and of the values of the correlations.

We might expect the correlation of the errors in the populations at different censuses to be much smaller than those of births and deaths, the latter being based on returns made by the same men.

We may put as an example $r=0.4$ and $r'=0.7$

$$u^2 = v^2 \frac{p^2}{b^2} \cdot \frac{1-r}{1-r'} + w^2 \frac{s^2}{b^2} \cdot \frac{l^2 + m^2 - 2rlm}{2 \times \frac{1}{15}}$$

as s/b is small we may neglect the second term and writing $p/b=3^*$

$$u^2 = 18v^2 \quad \text{or } u = v\sqrt{18}$$

$$\text{and if } v=1\% \quad u=4.24\%$$

u gives the calculated percentage standard error of the births or deaths in the decade determined from the census figures, which latter we have assumed to have a standard percentage error of unity.

Lower limit of error in vital Statistics.

We get two groups of equations from the typical form

$$b-d-(B-D)=0.$$

which may be written as

$$b-B-(d-D)=0.$$

where we will take $b>B$ and $d>D$, i.e., that the error in the vital statistics is always on the side of omission.

Call E_B the error in the number of births.

E_D " " " deaths.

then suppose we find from the census returns and the returns of births and deaths that

$$E_B - E_D = 0, \quad \text{where } E_B \text{ and } E_D \text{ are both } > 0$$

* Roughly $p=25,000,000$ and $b=8,500,000$.

then we get (i) if $C > 0$
 $E_B > C$
 (ii) if $C < 0$
 $E_D > C$

Hence if we take together all those districts for which $C > 0$, we find on the average that $E_B/B > C$ say; and if we take together all the districts for which $C < 0$, we find on the average that $E'_D/D' > C'$.

Now it seems to be a reasonable assumption that in those districts where we know nothing about the error in the death-rate, that it amounts to a fraction 'k' of the lower limit of the error in the districts for which we have such knowledge.

Thus

$$\begin{aligned} E_D/D &= k \cdot E'_D/D' & \text{and } E_B &= E_D + C \\ E'_B/B' &= k \cdot E_B/B \end{aligned}$$

and approximately $B = D$ and $B' = D'$

$$\begin{aligned} \text{Hence, } E_B/B &= C/B + E_D/D \\ &= C/B + E_D/D \\ &= C/B + k \cdot E'_D/D' \end{aligned}$$

Similarly

$$\begin{aligned} E'_D/D' &= C'/D' + k \cdot E_B/B & \text{and } E'_D &= E'_B + C' \\ &= C'/D' + k \cdot C/B + k \cdot E_D/D' \end{aligned}$$

or

$$\begin{aligned} \frac{E'_D}{D'} (1 - k^2) &= C'/D' + k \cdot C/B \\ E'_D/D' &= \frac{C'/D' + k \cdot C/B}{1 - k^2} \end{aligned} \quad (1V)$$

If we assume that $k = \frac{1}{2}$, this is equivalent to saying that the error in the death-rate in the districts where the birth-rate error is in excess is *half* the error in the death-rate in those districts in which the death-rate error is in excess, and the birth-rate is assumed to be wholly free from error.

$$\begin{aligned} \text{Putting } C'/D' &= 7.4 & \text{and } C/B &= 4.0 \\ E'_D/D' &= 9.4/3 = 3.133 = 12.5\% & \text{(error in death-rate)} \\ & & \text{and } E'_B/B' &= 5.1 \\ E_B/B &= (4.0 + \frac{1}{2} \times 7.4)/3 = 10.3\% & \text{(error in birth-rate)} \\ & & \text{and } E_D/D &= 6.3 \end{aligned}$$

thus the percentage errors in the birth and death-rates in the districts where the birth-rate is more in error are 10.3 and 6.3, and in the districts where the death-rate is more in error are 5.1 and 12.5.

The average error of birth and death-rates is thus

$$\frac{10.3 + 6.3 + 5.1 + 12.5}{4} = \frac{34.2}{4} = 8.5\%$$

Another alternative is to assume that where the birth-rate is more in error than the death-rate, the error of the latter is k times ($k < 1$) the former, and *vice versa*.

We shall then have,

$$\begin{aligned} E_B/B &= C/B + k \cdot E'_B/B' \\ E'_D/D' &= C'/D' + k \cdot E'_D/D' \\ E_B/B &= C/B \cdot 1/(1-k) \\ E'_D/D' &= C'/D' \cdot 1/(1-k) \end{aligned}$$

Assuming that in the districts where the birth-rate is more in error than the death-rate that the latter is half the former, we get

$$\begin{aligned} k &= \frac{1}{2} \\ E_B/B &= 2C/B \\ E'_D/D' &= 2C'/D' \end{aligned}$$

and assuming the same values of C and C' as before, we get

	Errors in	
	Birth-rate	Death-rate
In Districts where the error in birth-rate is greater	8.0 %	4.0 %
In Districts where error in death-rate is greater	14.8 %	7.4 %
The mean of these results is		
	$\frac{8.0 + 4.0 + 14.8 + 7.4}{4} = \frac{34.2}{4} = 8.5\%$	

On an average therefore 1 birth or death in 13 is not recorded.

* The figures given below are the percentage errors on the recorded births. The actual births will number 108·5 to 100 recorded.

The percentage errors on the actual births will be

$$8\cdot5/108\cdot5=7\cdot8\%$$

that is about 1 in 13.

Thus we reach the conclusion that the vital statistics of the Punjab are likely to be about 7 or 8 per cent. in error, and that, provisionally, errors of about 11 per cent. in the birth-rate and of say 5 per cent. in the death-rates may be adopted as probable. Finally it is clear that the census figures of 1911 and 1921 do not establish the accuracy of the vital statistics to a greater degree of accuracy than 7 or 8 per cent. of error.

Since making the above deductions slight arithmetical errors were discovered in Mr. Middleton's table on page 54, and the following revised table must be adopted instead:—

Calculation of the percentage errors of the birth and death returns on the assumptions that in any one district one at least of the returns is absolutely correct.

Districts.					Percentage excess error of	
					Birth-rate C positive.	Death-rate C negative.
1	Hissar	..	..	..	..	3·4
2	Karnal	..	..	..	..	1·2
3	Jullundur	..	..	..	0·9	..
4	Ludhiana	..	..	..	..	3·8
5	Ferozepore	..	..	..	0·09	..
6	Lahore	..	..	..	1·7	..
7	Amritsar	..	..	..	..	0·48
8	Simla	..	..	..	145·2	..
9	Kangra	..	..	..	..	4·1
10	Ambala	..	..	..	..	0·26
11	Hoshiarpur	..	..	..	..	1·27
12	Gurdaspur	..	..	..	..	8·5
13	Sialkot	..	..	..	..	8·0
14	Gujrat	..	..	..	..	12·61
15	Jhelum	..	..	..	..	9·36
16	Rawalpindi	..	..	..	..	6·18
17	Attock	..	..	..	..	16·6
18	Montgomery	..	..	..	22·6	..
19	Shahpur	..	..	..	25·4	..
20	Mianwali	..	..	..	..	9·8
21	Lyallpur	..	..	..	..	9·7
22	Jhang	..	..	..	..	8·0
23	Multan	..	..	..	..	5·79
24	Muzaffargarh	..	..	..	..	7·29
25	Dera Ghazi Khan	..	..	..	..	13·3
Total					195·89	132·94
Average					32·65	7·0

If we adopt the corrected values of the excess errors in the birth and death-rates instead of Middleton's values, then excluding Simla, the percentage excess error is

10·14 % for the birth-rate

7·00 % for the death-rate.

Let us take these as 10 % and 7 % respectively,

i. e., $C/B=10$ and $C'/D'=7$

- (i) Then on the assumption that the error in the death-rate in the districts where the birth-rate error is in excess is half the average error in the districts where the minimum can be fixed.*

$$E_B/B = C/B + \frac{1}{2} E'/D'$$

$$E'_D/D = C'/D' + \frac{1}{2} E/B$$

We get

$$E_B/B = 18, \quad E_D/D = 6, \quad E'_D/D' = 12, \quad E'_B/B' = 9$$

$$\text{Average error} = \frac{18+12+6+9}{4} = 11.25\%$$

- (ii) On the assumption that the error in the birth-rate, where the death-rate error is in excess, is $\frac{1}{2}$ the error in the death-rate, and *vice versa*.

$$E'_D/D' = C'/D' + \frac{1}{2} E'_B/B'$$

$$E_B/B = C/B + \frac{1}{2} E_D/D$$

We get

$$E_B/B = 20, \quad E_D/D = 10, \quad E'_D/D' = 14, \quad E'_B/B' = 7.$$

$$\text{Average error} = \frac{20+14+10+7}{4} = 12.75\%$$

Taking the mean of the two results we may say that the average error of the birth and death-rates, *assuming the censuses are correct*, is 12 %.

If we treat this as the standard error and adopt an estimate of 11 % for the standard error of a census, the standard error of the birth- and death-rates is given by

$$E_v^2 = (12)^2 + (4.24)^2$$

$$= 144 + 18 = 162$$

$$E_v = 12.7\%$$

This is the percentage error on the recorded births and deaths. Assuming the errors are always in defect the percentage error on the actual births and deaths is

$$\frac{12.7 \times 100}{112.7} = 11.3\%$$

This result is still more unfavourable to the accuracy of the vital statistics, and it may exaggerate their incorrectness.

However it is clear that whatever the standard error in the vital statistics is, whether 5, 8, or 11 per cent., we are very far from being justified in assuming these statistics to be really close to the truth.

* Note that dashes indicate that we are dealing with districts in which the death-rate error is in excess.

APPENDIX 2.

The relationship between density of rural population per square mile with the District percentage of cultivated area.

Briefly, there is, as Mr. Middleton states a clear association between density of rural population and percentage of cultivated area in each District, but the conclusion that density of population increases faster than the percentage of the cultivated area, can hardly be said to be established without a laborious analysis. Speaking statistically the law of density could only be accepted, if it were shown—

(a) that the regression of density of population on percentage of cultivated area is not linear.

(b) that the regression curve is concave upwards.

Now, the testing of these points, making allowance for the errors due to the smallness of the sample, is a considerable task ; but we can get an approximate result by fitting the data with second and third order parabola. If this is done we find (calling "D" the rural density per square mile, and "k" the percentage of cultivated area)

$$D = -23.260 + 6.989k - 0.026k^2$$

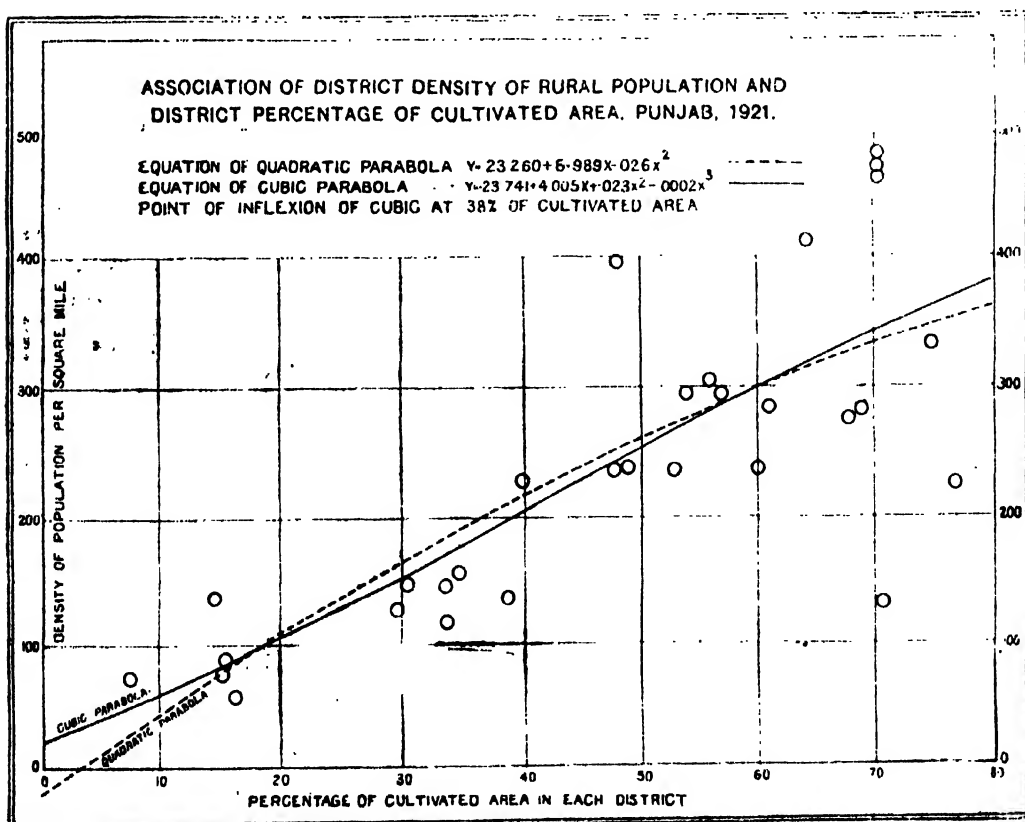
$$D = 23.741 + 4.005k + 0.023k^2 - 0.0002k^3$$

These equations show that—

- the relation of density to cultivated area is expressed very nearly by a straight line, both the square and cubic terms being small up to a percentage of 80 for the cultivated area, which is above the limit found in this data;
- as judged by the quadratic the curvature is convex upwards, which is exactly the opposite conclusion to that reached in paragraph 18;
- as judged by the cubic, there is an almost negligible concavity upwards for values of k less than 38 per cent., but that for higher values of k the curve is once more convex upwards.

It is by no means certain, without a much fuller analysis, whether the curvature would be positive or negative, if the errors of random sampling could be eliminated, and it is not intended to set up any law in opposition to that of Mr. Middleton. Unless, however, he has used other and wider material than that discussed here, judgment as to the nature of the divergence from linearity of the association of density of population and cultivated area must be suspended. In fact one might in slang phrase say that the data give a very good imitation of linear relationship.*

The data and the quadratic and cubic parabola are shown in the diagram below—

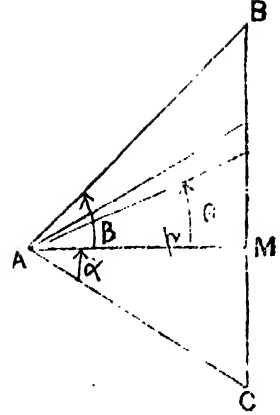


*This does not mean, of course, that there is alone one correspondence between density and percentage of cultivated area. Even if the correlation is skew, it is certainly not perfect—a point no doubt which Mr. Middleton implied, though he did not state it.

APPENDIX 3.

MEAN SCALAR DISTANCE.

Let us find the mean scalar distance of a triangle
ABC from the Apex A.



The value is given by

$$\bar{S} = \frac{\int \int r^2 d\theta dr}{\int \int r d\theta dr}, \text{ integrated over the area of the triangle.}$$

The limits of r are 0 and $p \sec. \theta$, for $0 < \theta < \beta$

The limits of r are 0 and $p \sec. \theta$, for $0 < \theta < \alpha$

where α and β are the angles which the perpendicular p makes with the sides AC and AB respectively.

Call the area of the triangle A, then

$$\begin{aligned} A\bar{S} &= \int_0^\beta \int_0^{p \sec. \theta} r^2 dr d\theta + \int_0^\alpha \int_0^{p \sec. \theta} r^2 dr d\theta \\ &= \int_0^\beta \frac{p^3 \sec.^3 \theta}{3} d\theta + \int_0^\alpha \frac{p^3 \sec.^3 \theta}{3} d\theta \\ &= \frac{p^3}{3} \left[\int_0^\alpha \sec.^3 \theta d\theta + \int_0^\beta \sec.^3 \theta d\theta \right] \end{aligned}$$

$$\begin{aligned} \text{Now } \int \sec.^3 \theta d\theta &= \int \sec. \theta d \tan \theta \\ &= \sec. \theta \tan \theta - \int \tan \theta \sin \theta \sec.^2 \theta d\theta \\ &= \sec. \theta \tan \theta - \int \sin^2 \theta \sec.^3 \theta d\theta \\ &= \sec. \theta \tan \theta - \int d\theta \sec.^3 \theta + \int \sec. \theta d\theta \end{aligned}$$

$$\therefore 2 \int \sec.^3 \theta = \sec. \theta \tan \theta + \log \tan \left(\frac{\pi}{4} + \frac{\theta}{2} \right)$$

Thus

$$\begin{aligned} \frac{A\bar{S}}{A\bar{S}} &= \frac{p^3}{6} \left[\sec. a \tan a + \sec. \beta \tan \beta + \log \tan \left(\frac{\pi}{4} + \frac{a}{2} \right) \right. \\ &\quad \left. + \log \tan \left(\frac{\pi}{4} + \frac{\beta}{2} \right) \right] \\ &= \frac{p^3}{6} \left[\sec. a \tan a + \sec. \beta \tan \beta + \log \tan \left(\frac{\pi}{4} + \frac{a}{2} \right) \tan \left(\frac{\pi}{4} + \frac{\beta}{2} \right) \right] \end{aligned}$$

If the triangle is isosceles $a = \beta$, and the mean scalar distance is then

$$\bar{S} = \frac{p^3}{3A} \left[\sec. a \tan a + \log \tan \left(\frac{\pi}{4} + \frac{a}{2} \right) \right]$$

Now we have for the triangles formed by joining the terminals of a side to the centre the following values of a .

Figure.	a	$\sec a \tan a$	$\log \tan \left(\frac{\pi}{4} + \frac{a}{2} \right)$	Sum cols. 2 and 3.	p^3/A^2	$3\bar{S}\sqrt{A}$	\bar{S}/\sqrt{Q}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hexagon	30°	.666667	.5493061	1.215973	2.279507	2.771819	.377197
Square	45	1.414211	.8813736	2.295588	1	2.295588	.382598
Equilateral triangle	60	3.464102	1.3169577	4.781060	1/2.279507	2.097410	.403647

Now call Q the whole area of the figure.

i. e., $Q = 6A$ for the hexagon

$= 4A$ for the square

$= 3A$ for the triangle (equilateral)

For a circle from the centre $\bar{S}/\sqrt{Q} = .376126$

Returning to the general formula, a graphic method of determining the mean scalar distance, applicable to an irregular boundary, will be developed.

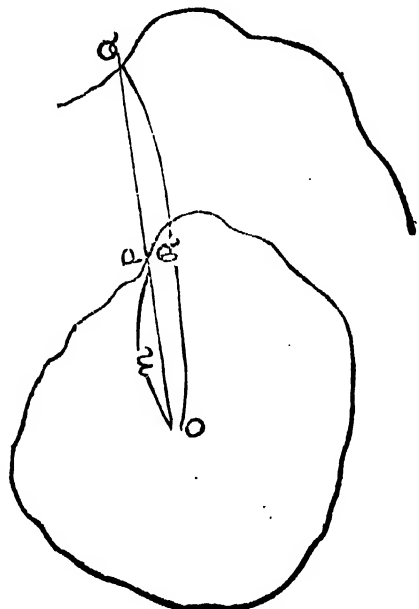
We have

$$\bar{S} = \frac{\iint r^2 d\theta dr}{\iint r d\theta dr}, \text{ integrated over the whole area of the figure.}$$

Let O be the point from which the mean scalar distance is to be determined.

Let P be any point in the boundary.

Let Q be a point on OP (produced if necessary), such that



$$O P^2 = l \cdot O Q^2$$

then if $O Q = R$, we get $3 r^2 \delta r = 2 l \cdot R \delta R$
and

$$\bar{S} = \frac{\int \int_{\Delta} l R d\theta \cdot dR}{\int \int_{\Delta} r d\theta \cdot dr}$$

where the integrals extend over the outer and the inner curves respectively.

Calling Δ the area of the original curve

Δ' the area of the constructed curve

$$\bar{S} = \frac{2}{3} \frac{\Delta'}{\Delta} \cdot l$$

and the mean scalar distance can at once be obtained planimetrically.

Let l be the unit of length on which $O P$ is measured

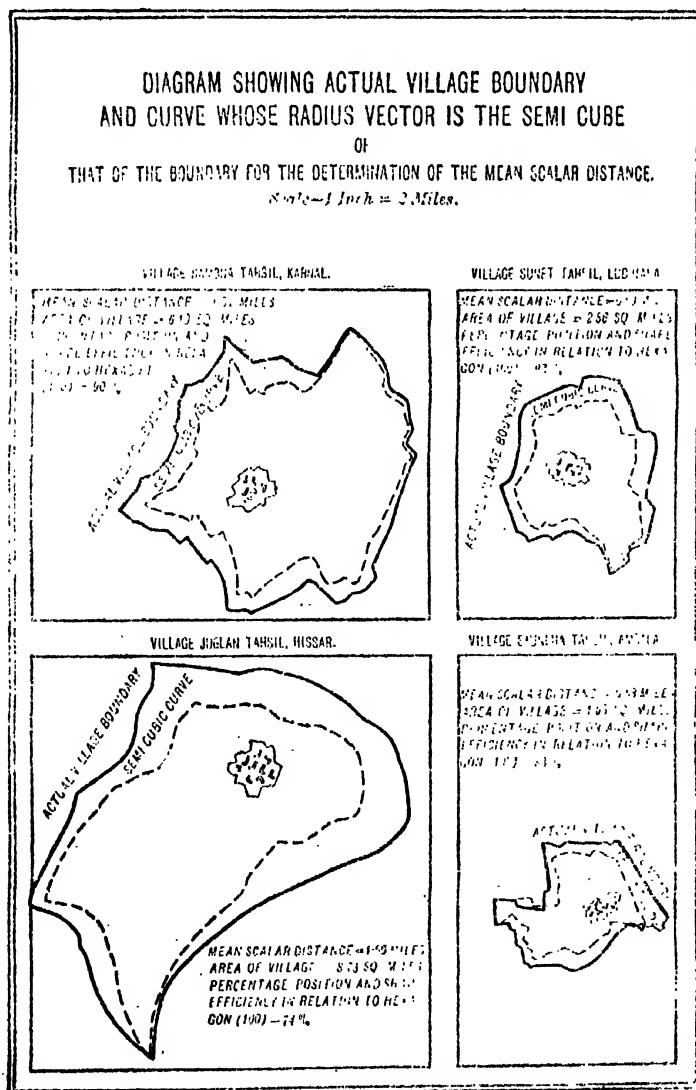
$$l = \frac{O P^2}{O Q^2}$$

and where $O P = O Q$ we get,

$$l = O P = O Q.$$

In order to calculate graphically the mean scalar distance for any contour from any point, it will suffice to measure the area of the two curves in the same unit, and multiply two-thirds of their quotient by the distance adopted as unity, for which the two radii vectors are equal.

The contours of 4 villages together with the semi-cubical curve for the calculations



of the mean scalar distance are shown in the attached diagram. The relative data for these, and 2 other villages are given in the statement below, and the figures in col. 7 of this statement show that the shape of the village boundary and the position of the abadi, is far from being as favourable to agricultural operations as they might be.

No.	Village.	District.	Tahsil.	Area in square miles.	$\frac{377197}{\sqrt{A}}$ Mean scalar distance for hexagonal boundary of (A)	Actual mean scalar distance. S_n	Percentage efficiency of shape and position of abadi($S_n/S_n \times 100$)	REMARKS.
1	2	3	4	5	6	7	8	9
1	Juglan ...	Hissar ...	Hissar ...	8.7324	1.114817	1.498937	74.3	
2	Rambah ...	Karnal ...	Karnal ...	6.0986	.931677	1.087739	89.8	
3	Sundab ...	Ambala ..	Ambala ...	1.6473	.483944	.579858	83.5	
4	Maina ...	Rohtak ...	Rohtak ...	3.1430	.657832	.718351	91.6	
5	Sunet ...	Ludhiana ...	Ludhiana ...	2.8618	.687840	.688661	92.4	
6	Ladhewali ...	Jullundhar ...	Jullundhar ...	1.1872	.402092	.445322	90.3	

APPENDIX 4.

MORTALITY FROM VARIOUS DISEASES.

(A). The annual death-rate from 1867 to 1921 (inclusive) from (1) cholera, (2) small-pox, (3) bowel complaints, (4) plague, (5) fevers, (6) all "other" causes, and (7) all causes. (B)—The seasonal variation of the deaths from the above causes for the 2 periods 1867—1896 (30 years) and 1897—1921 (25 years). (C).—A comparison of the urban and rural death-rates from the causes enumerated in (A) above.

The object of this Appendix is merely to summarise in convenient form the broad statistical features of the deaths as classified in the Public Health returns since 1867.

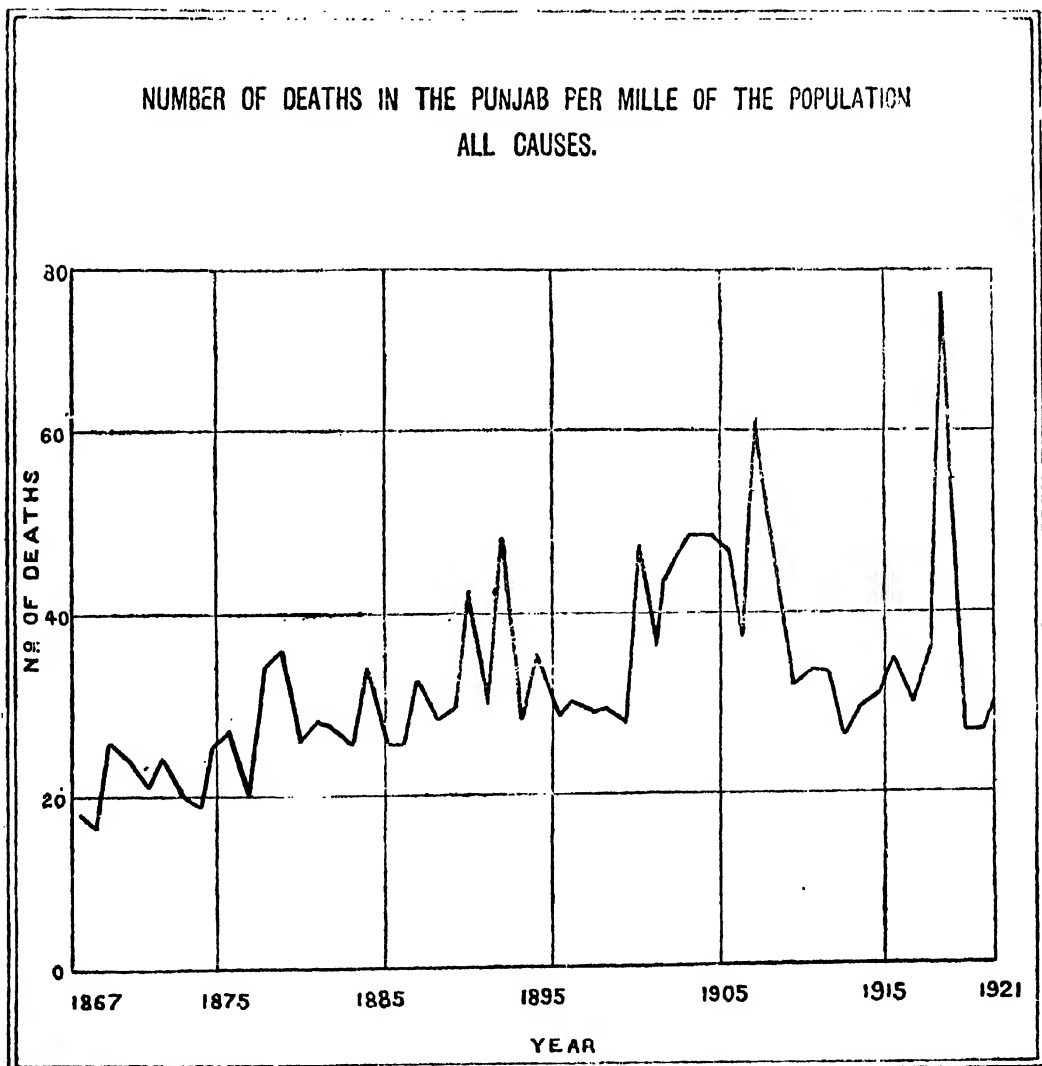
The three sections into which the Appendix is divided will be taken seriatim.

(A).—*The annual death-rate from 1867 to 1921 (inclusive) from (1) cholera, (2) small-pox, (3) bowel complaints, (4) plague, (5) fevers, (6) all "other" causes, (7) all causes.*

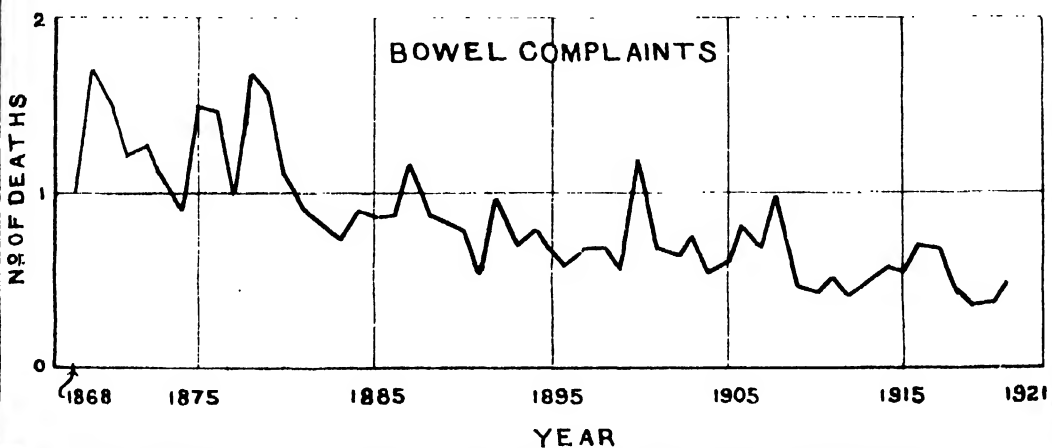
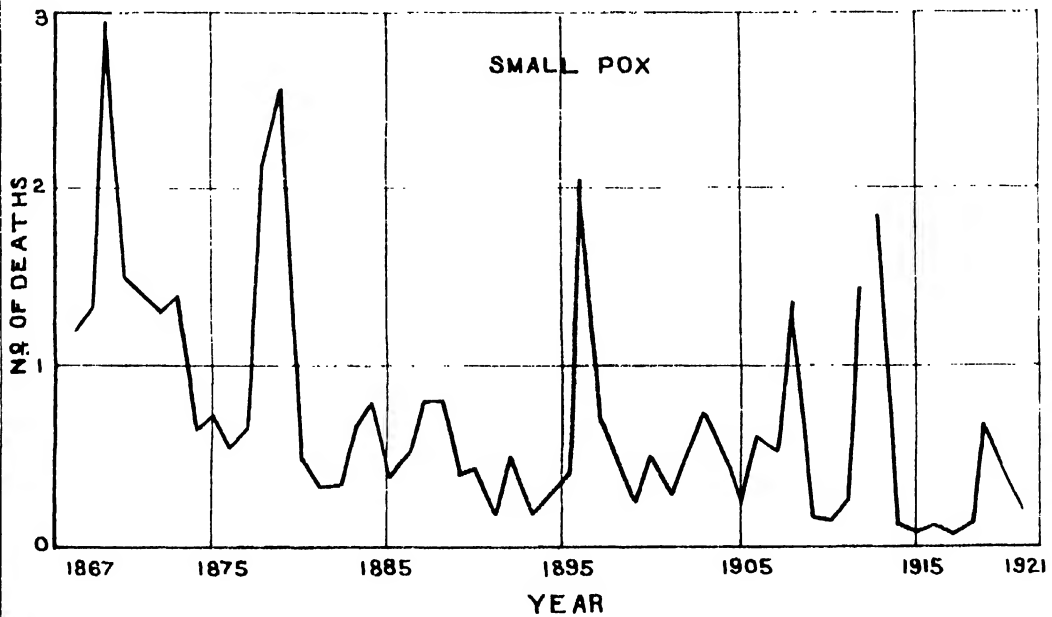
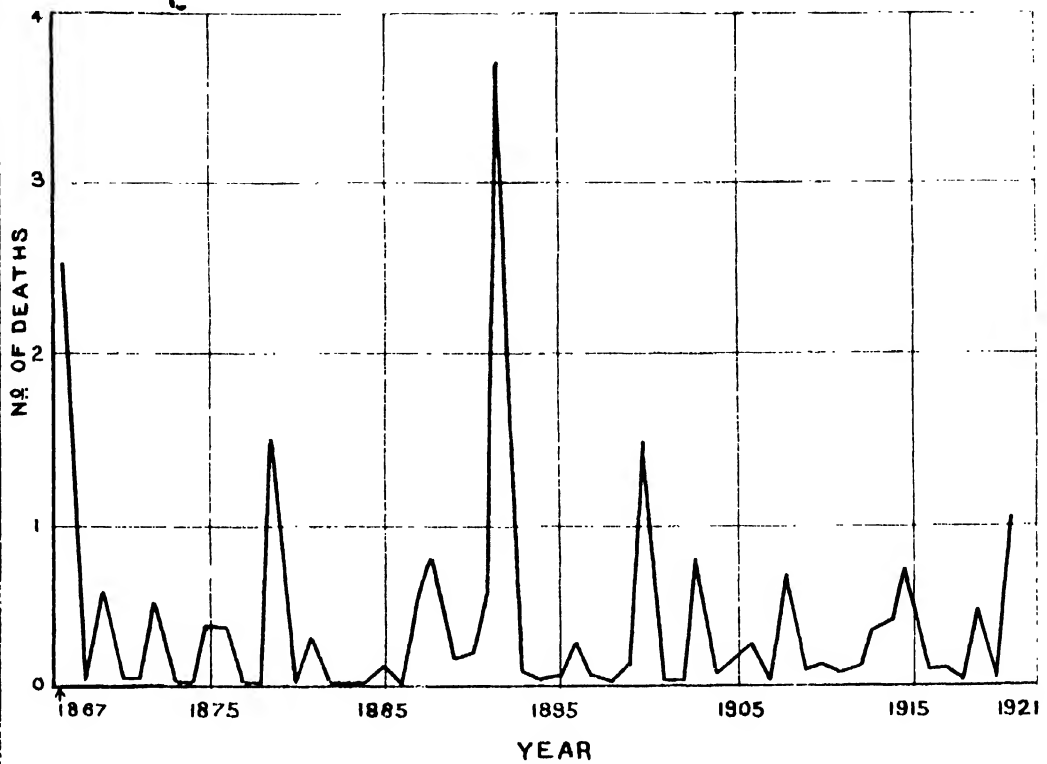
The death-rates have all been calculated afresh from the original data of mortality from each disease for the Punjab (British Territory) as constituted from time to time, the North-West Frontier Province being excluded from 1900 and onwards. The actual census returns for 1868, 1881, 1891, 1901, 1911 and 1921 have been used for the years named; but for the inter-censal periods the population has been found by intercalating geometric series, whose end terms coincide with the actual census populations. The whole set of enumerated and calculated populations is shown in the table in statement I. For the sake of comparison of the growth of the population before and after the separation of the North-West Frontier Province the figures for the territory comprised in this Province have been added to the Punjab figures since 1900 (inclusive). The figures suffer from the defect (so far as comparison goes) of the exclusion since 1911, of the part of the Delhi population which lies to the west of the Jumna for which separate figures are not available in the tables.

The interpolated population will differ from the actual population, sometimes by large amounts, and it would have been better to use the vital statistics of births and deaths to determine the population at one census from that of the preceding census, and then apply a geometric progression to the residual differences between the calculated and observed populations at the later census.

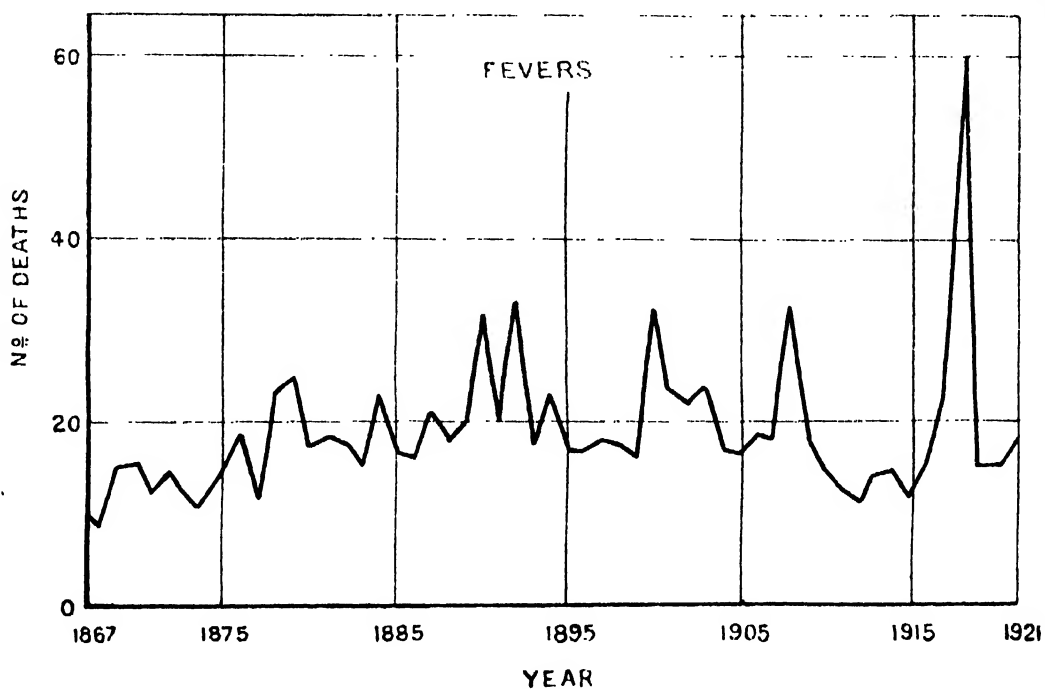
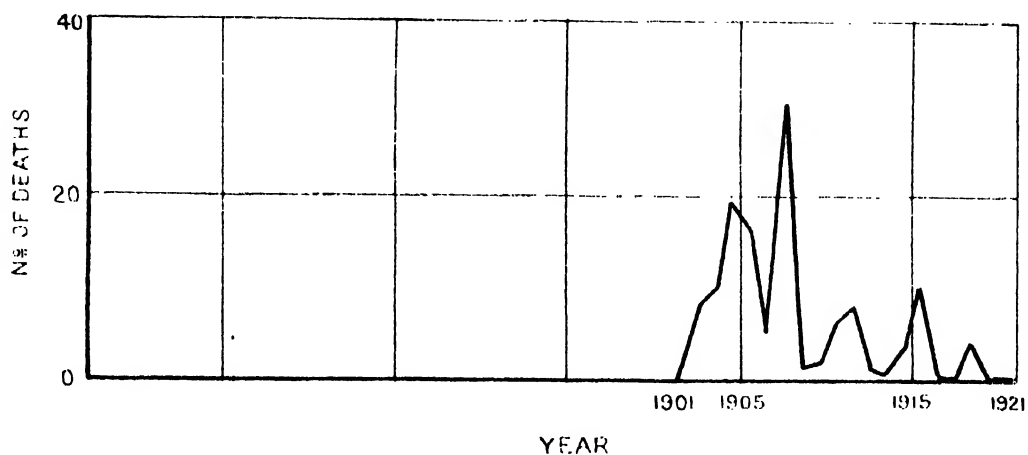
The diagrams may now be consulted.



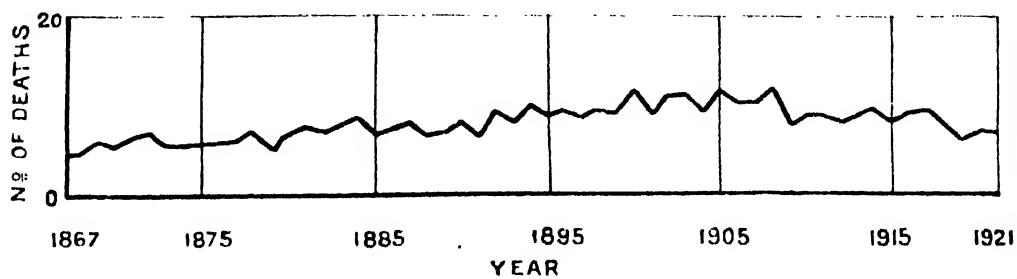
NUMBER OF DEATHS IN THE PUNJAB PER MILLE OF THE POPULATION CHOLERA.



NUMBER OF DEATHS IN THE PUNJAB PER MILLE OF THE POPULATION PLAGUE.



ALL OTHER CAUSES THIS INCLUDES DEATHS FROM INJURIES & RESPIRATORY DISEASES ALSO.



(B)—The seasonal variation of deaths.

The seasonal mortality has been studied by Newsholme's method, in which the average daily death-rate is determined in two ways (1) by dividing the total mortality of the month by the number of days in the month, and (2) by dividing the total mortality of the year by the number of days in the year. The ratio of the quotient in (1) to the quotient in (2), expressed as a percentage gives a measure of the relative intensity of the disease month by month, as compared to the average intensity throughout the year. The percentages for each month, year by year, having been determined, the mean monthly intensity and the standard deviation are readily determined for any particular group of years. In the present case the statistics for 1867-1921 have been divided into two groups, namely, 1867-1896 (30 years) and 1897-1921 (25 years), the objects aimed at being (1) to obtain eventually a comparative series of groups each of 30 years' duration as the figures for future years become available; (2) to distinguish the pre-colony era from the colony era that was inaugurated by the starting in 1897 of the Lower Chenab Canal, and (3) to discriminate the seasonal variations which arise from chance from those which are basic, and may, therefore, be expected to be common to both groups of years.

The diagrams below give the means and co-efficients of variation of the mortality rates calculated in the manner described for each month for the two groups of years separately.

(C) Comparison of the urban and rural death-rates from various diseases.

The full statements of the deaths year by year from each disease in rural and urban areas are too lengthy to be reproduced. From the tables only the following results are noted :—

Disease.	AVERAGE OF THE ANNUAL DEATH-RATES per mille.	
	Rural areas.	Towns.
Cholera (1877—1921, excluding 1885—1888)	0.30	0.56
Small-pox (1877—1921, excluding 1885—1888)	0.11	0.94
Plague (1901—1921)	6.53	4.73
Fevers (1877—1921, excluding 1885—1888)	22.88	20.69
Bowel complaints (1877—1921, excluding 1885—1888)	0.66	2.51
Respiratory diseases (1902—1921)	2.32	5.77
Injuries (1877—1921, excluding 1885—1888)	0.35	0.40
All "other" causes (1877—1921, excluding 1885—1888)	6.80	11.26
All causes (1877—1921, excluding 1885—1888)	36.04	41.58

We may summarise the statistical conclusions indicated by the 3 classes of figures in respect of each disease. The medical expert must interpret them in the light of his own technical knowledge.

CHOLERA.

General trend.—The mortality from cholera shows no signs of general diminution in the 55 years 1867—1921.

Seasonal variation.—Cholera is most evident during the summer months; though there is a very marked difference between the seasonal variation in the 1st and 2nd group of years. During 1867—1896 the cholera mortality curve had a double hump, but is only singly humped in the later years 1897—1921. Light is thrown on this phenomenon by considering separately years of high, medium, and low cholera mortality, as it is found that the years of medium and low mortality exhibit a double hump, the first in May or June, the second in September; while years of high mortality have only a single maximum in August.

The variability of deaths from cholera (shown by the dotted lines on the diagrams) is very high, as might have been anticipated from its epidemic character.

Urban and rural areas.—Cholera produces a much greater mortality in towns than in villages. Out of 39 years the rural areas had a greater cholera mortality in only 7 years.

SMALL-POX.

General trend.—The seasonal variation curves for 1867—1896 and 1897—1921 agree very closely; so do their variabilities. Maximum mortality is to be expected in May, December is the month in which there is the greatest uncertainty as to an outbreak.

Urban and rural areas.—Small-pox causes $1\frac{1}{2}$ times the proportionate number of deaths in towns than it does in villages. In only 8 years out of 39 was there a greater rural than urban mortality.

BOWEL COMPLAINTS.

General trend.—There appears to be a very steady tendency for deaths from bowel complaints to diminish, and since 1900 the death-rate has not exceeded 1 per mille.

Seasonal variation.—The incidence of bowel complaints is greatest at two parts of the year, May and October. The variability is low, in no case exceeding 25 per cent., the causes which produce bowel complaints being apparently more or less similar in character and intensity from year to year.

Urban and rural areas.—Town dwellers are essentially more subject to bowel complaints than residents in rural areas. Out of 41 years 1877—1881 and 1889—1921, in no single year was the mortality in urban less than in rural areas from this cause.

PLAGUE.

General trend.—So far as any general tendency is exhibited by a disease which appears first in recent Punjab history in 1901, it might be supposed that plague is disappearing.

Seasonal variation.—The data are too limited for a secure determination.

Urban and rural areas.—Rural areas suffered more than urban areas in 12 out of 21 years ending 1921.

FEVERS.

General trend.—Since 1885 the general tendency appears to be for a constancy of the death-rate from fevers: the high mortality in 1918 is due to the Influenza epidemic.

Seasonal variation.—Two maxima appear in the seasonal chart. One in May-June is due to relapsing fever—the other in October-November to malaria. The variability is low, for the most part being below 30 per cent., consonant with the endemic character of these diseases.

ALL "OTHER" CAUSES.

General trend.—This appears to have been upwards from 1867 to 1908, with a slight tendency to diminish since.

Seasonal variation.—As might have been expected there is very little variation from month to month in the deaths from "other" causes, which includes deaths from all sources except cholera, small-pox, bowel complaints, plague and fevers. Agreeably with this the co-efficients of variation are very small; in February, July and August they are below 10 per cent. in both groups of years.

Urban and rural areas.—Deaths from "other" causes in towns always outnumber proportionately the numbers of deaths in rural areas.

ALL CAUSES.

General trend.—The general death-rate whether due to physiological causes or to a better reporting agency, rose, on the whole, from 1867—1890; since then it appears to be on the average fairly stationary, though there was great mortality in 1908 and 1918.

Seasonal variation.—Deaths from fevers constitute about 75 per cent. of all deaths in the Punjab, and the seasonal variation accordingly follows the fever chart fairly closely.

Urban and rural areas.—The general urban death-rate is greater than that in the rural areas in 37 out of 41 years.

STATEMENT 1.

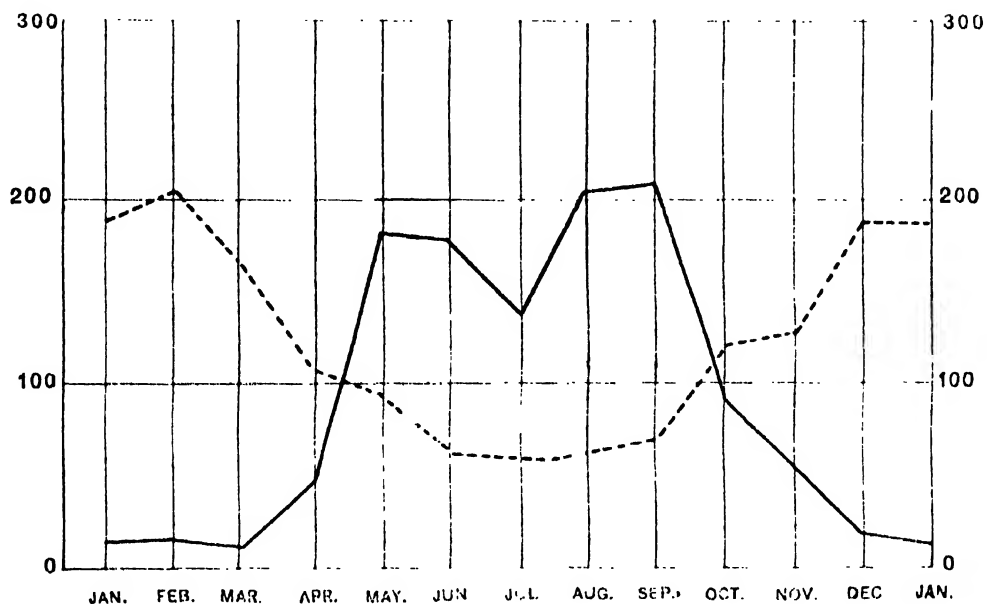
Statement showing the population of Punjab from 1867 to 1921 (calculated).

No.	Year.	Population of the British Punjab.	No.	Year.	Population of the British Punjab.	Population of Punjab as comprised prior to 1860.
1	1867	17,611,498	29	1895	21,488,470	
2	1868	17,611,498	30	1896	21,646,766	
3	1869	17,703,839	31	1897	21,806,210	
4	1870	17,790,665	32	1898	21,966,822	
5	1871	17,889,971	33	1899	22,128,624	
6	1872	17,983,770	34	1900	20,330,379	22,291,614
7	1873	18,078,079	35	1901	20,330,339	22,455,819
8	1874	18,172,864	36	1902	20,294,517	22,586,175
9	1875	18,268,143	37	1903	20,258,756	22,717,295
10	1876	18,363,932	38	1904	20,223,056	22,849,155
11	1877	18,460,214	39	1905	20,187,437	22,981,802
12	1878	18,557,006	40	1906	20,151,859	23,115,212
13	1879	18,654,310	41	1907	20,116,362	23,249,408
14	1880	18,752,107	42	1908	20,080,926	23,384,367
15	1881	18,850,437	43	1909	20,045,531	23,520,113
16	1882	19,042,975	44	1910	20,010,217	23,656,044
17	1883	19,237,493	45	1911	19,974,956	23,793,983
18	1884	19,434,000	46	1912	20,044,848	23,983,764
19	1885	19,632,514	47	1913	20,115,000	24,175,091
20	1886	19,883,045	48	1914	20,185,372	24,367,919
21	1887	20,035,631	49	1915	20,258,004	24,562,201
22	1888	20,240,271	50	1916	20,326,895	24,758,210
23	1889	20,447,022	51	1917	20,398,026	24,955,677
24	1890	20,655,866	52	1918	20,469,356	25,154,737
25	1891	20,866,847	53	1919	20,541,026	25,355,392
26	1892	21,020,552	54	1920	20,612,896	25,557,641
27	1893	21,175,384	55	1921	20,685,024	25,761,500
28	1894	21,331,364				

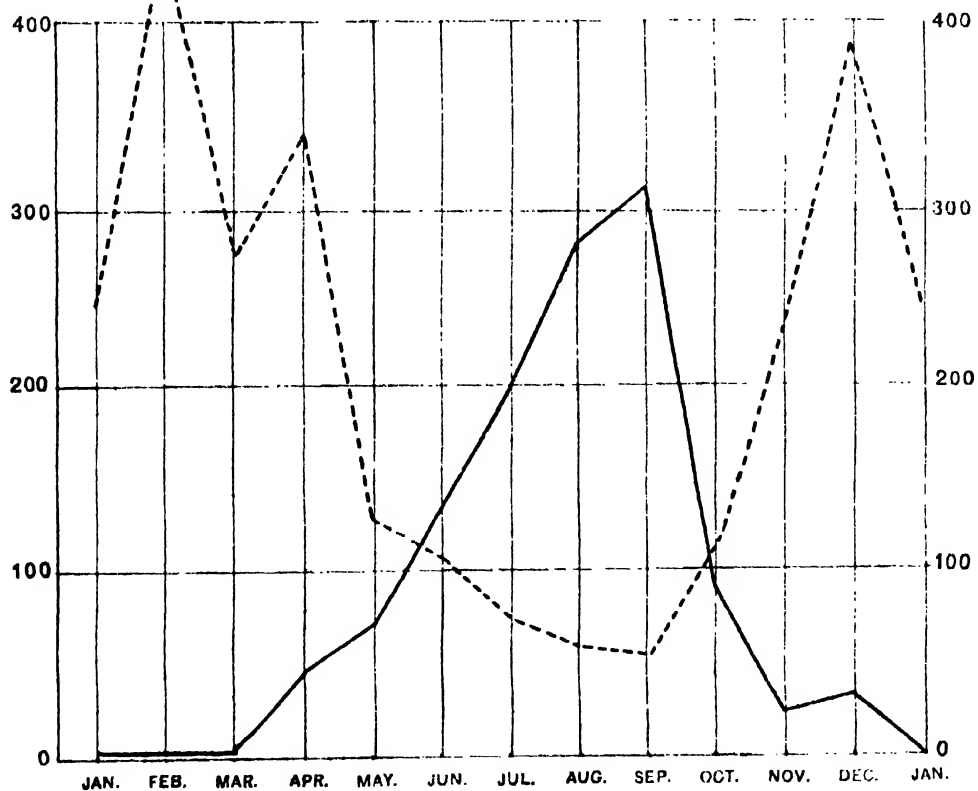
**DEATHS IN THE PUNJAB FROM CHOLERA
THEIR SEASONAL VARIATION & STEADINESS OF RECURRENCE
FIRST GROUP OF 30 YEARS 1867-1896.**

MEAN PERCENTAGES

COEFFICIENTS OF VARIATION



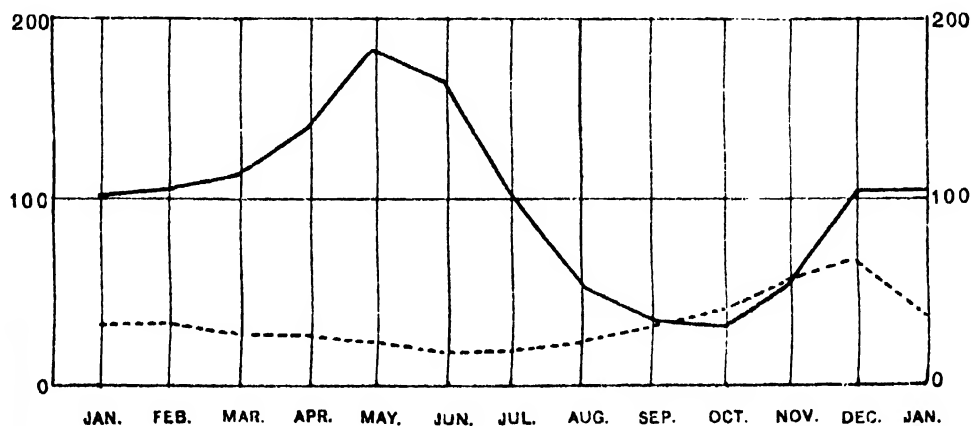
SECOND GROUP OF 25 YEARS 1897-1921.



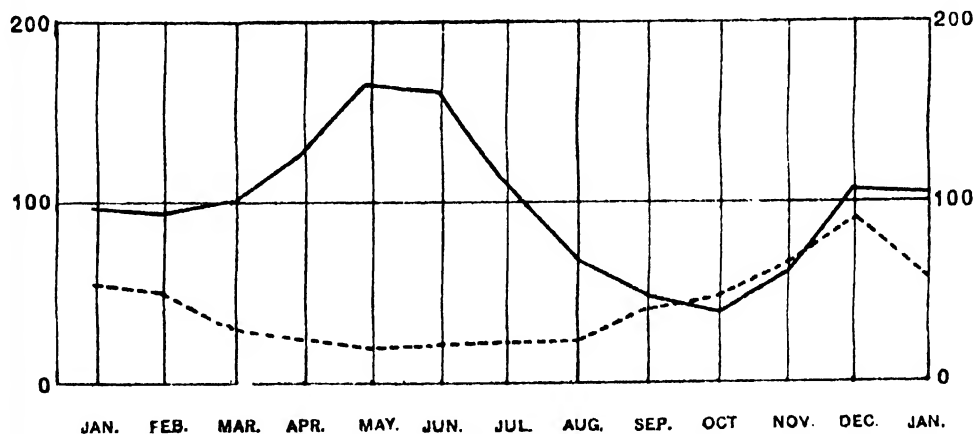
**DEATHS IN THE PUNJAB FROM SMALLPOX
THEIR SEASONAL VARIATION & STEADINESS OF RECURRENCE
FIRST GROUP OF 30 YEARS 1867-1896.**

MEAN PERCENTAGES

COEFFICIENTS OF VARIATION



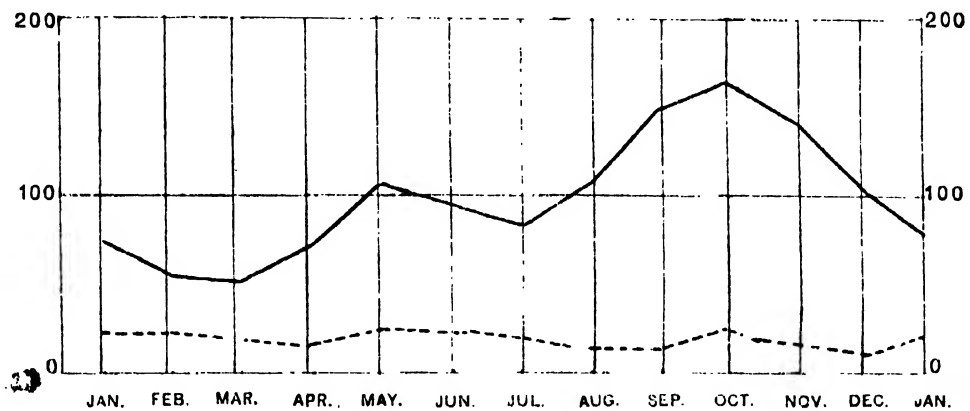
SECOND GROUP OF 25 YEARS 1897-1921.



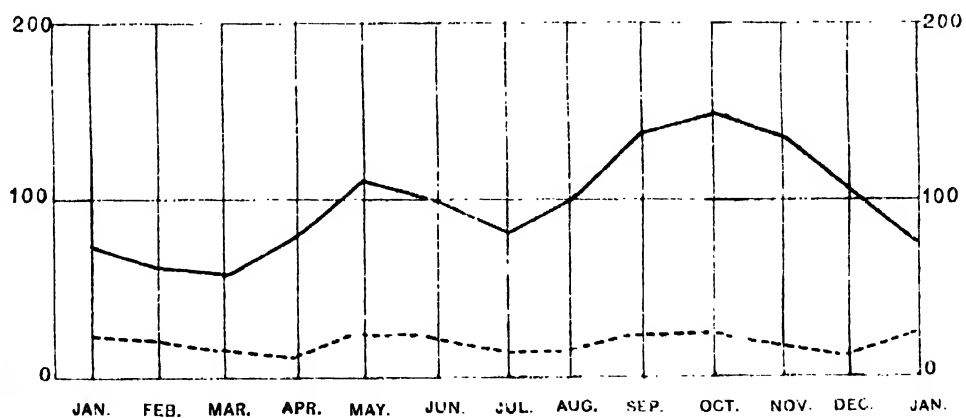
DEATHS IN THE PUNJAB FROM BOWEL COMPLAINTS
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MEAN PERCENTAGES

COEFFICIENTS OF VARIATION

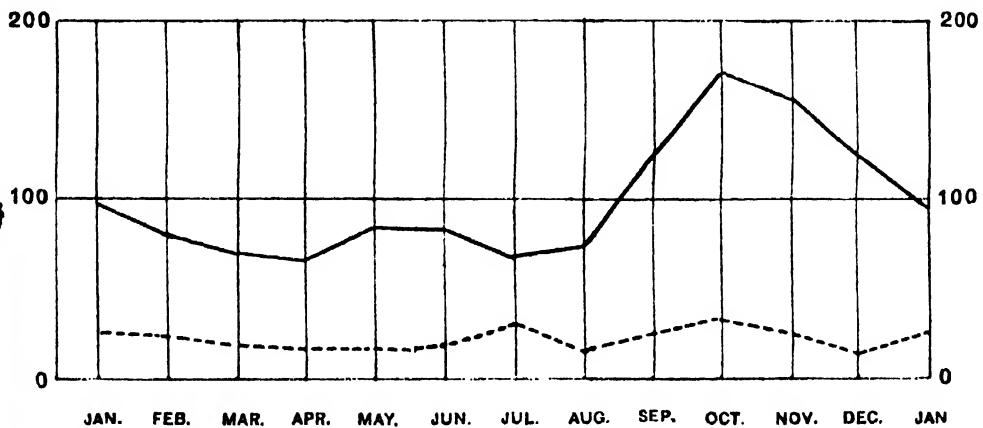


SECOND GROUP OF 25 YEARS 1897-1921.

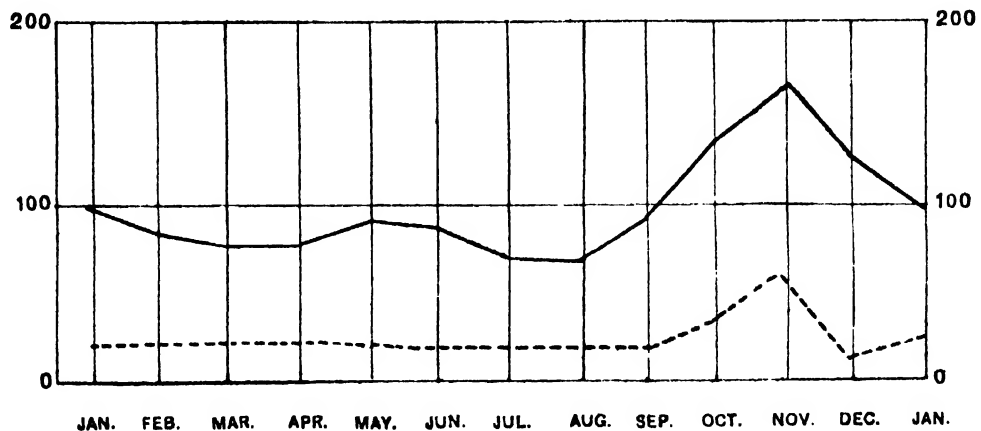


**DEATHS IN THE PUNJAB FROM FEVERS
THEIR SEASONAL VARIATION & STEADINESS OF RECURRENCE
FIRST GROUP OF 30 YEARS 1867-1896.**

MEAN PERCENTAGES —————
COEFFICIENTS OF VARIATION - - - - -



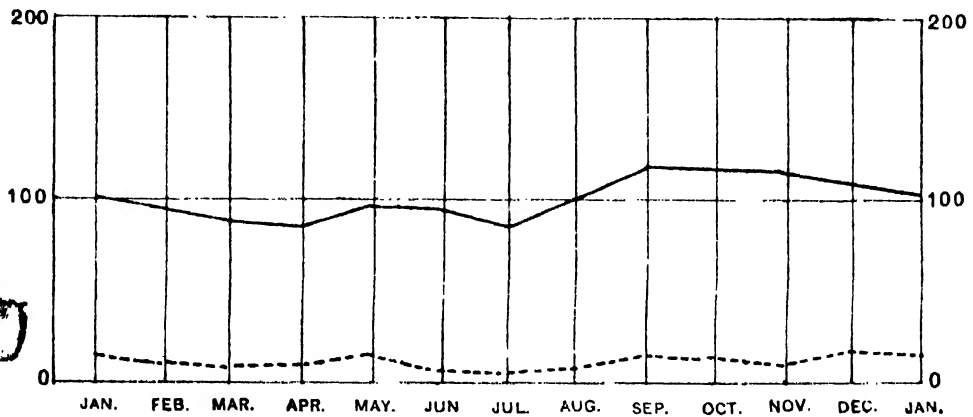
SECOND GROUP OF 25 YEARS 1897-1921.



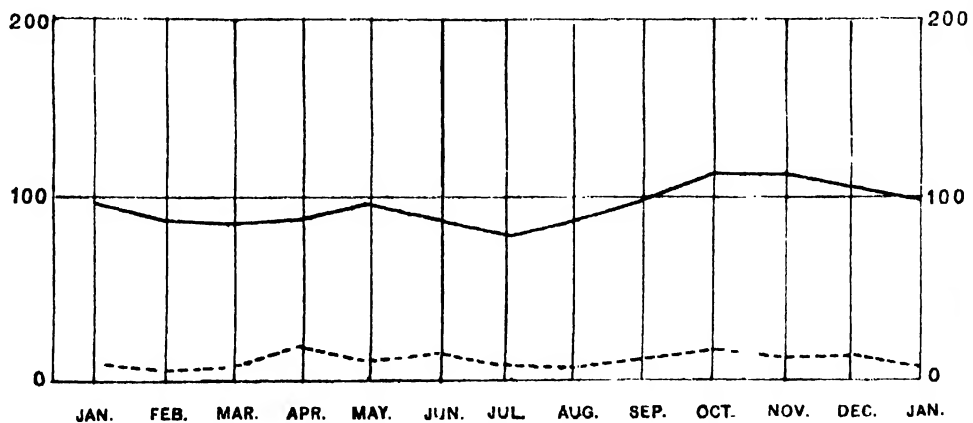
DEATHS IN THE PUNJAB FROM ALL OTHER CAUSES
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MEAN PERCENTAGES

COEFFICIENTS OF VARIATION



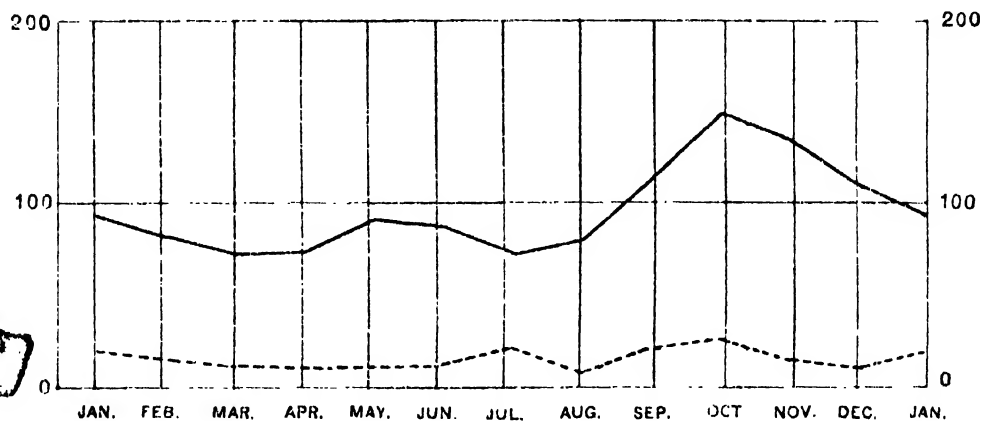
SECOND GROUP OF 25 YEARS 1897-1921.



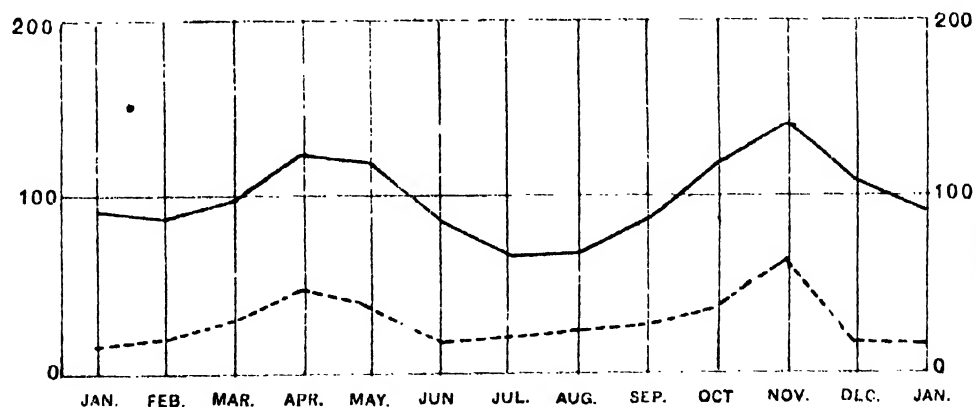
DEATHS IN THE PUNJAB FROM ALL CAUSES
THEIR SEASONAL VARIATION & STEADINESS OF RECURRENCE
FIRST GROUP OF 30 YEARS 1867-1896.

MEAN PERCENTAGES —————

COEFFICIENTS OF VARIATION - - - - -



SECOND GROUP OF 25 YEARS 1897-1921.



APPENDIX 5.

CHANCE OF SURVIVAL FOR CHILDREN BORN IN VARIOUS YEARS OF MARRIED LIFE.

Take a single parental pair who have been married x years. Let the chance, that a child born in the p th year of marriage survive till the beginning of $(p+1)$ th year, be R_p . [Properly R_p will vary with the ordinal No. of the child, children born after the first having a better survival rate than the first-born.]

Let the chance, that a child born in the p th year of marriage lives from the beginning of the q th up to the end of the q th year of its age, be $R_{p,q}$.

Then the children born in the first year of married life alive at the end of the first year are—

f, R, \dots

The children alive at the end of the 2nd year are —

$$\begin{aligned} & f_1 R_{1,1} R_{1,2} && \text{(aged 1 to 2)} \\ & + f_2 R_{2,1} && \text{(aged 0 to 1)} \end{aligned}$$

The children alive at the end of the 3rd year are —

$$\begin{aligned} & f_1 R_{1,1} R_{1,2} R_{1,3} && \text{(aged 2 to 3)} \\ & + f_2 R_{2,1} R_{2,2} && \text{(aged 1 to 2)} \\ & + f_3 R_{3,1} && \text{(aged 0 to 1)} \end{aligned}$$

~~The~~ The children alive at the end of the x th year are —

$$\begin{array}{rcccccccc}
+f_1 & R_{1,1} & R_{1,2} & \dots & \dots & \dots & R_{1,x} & \text{(aged } x-1 \text{ to } x) \\
+f_2 & R_{2,1} & R_{2,2} & \dots & \dots & \dots & R_{2,x-1} & \text{(aged } x-2 \text{ to } x-1) \\
+f_3 & R_{3,1} & R_{3,2} & \dots & \dots & \dots & R_{3,x-2} & \text{(aged } x-3 \text{ to } x-2) \\
\dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \\
\dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \\
+f_x & R_{x,1} & & & & & & \text{(aged } 0 \text{ to } 1) \dots
\end{array}$$

There are in the summation $\frac{x(x+1)}{2}$ different R's. That is for a marriage of 30 years duration the number of R's will be 465. By putting all the R's equal to each other we are therefore making a pretty liberal assumption. It seems, however, necessary to do so, in order to get practical conclusions.

Put

$$\begin{array}{ccccccc} R_{1,1} & = & R_{1,2} & = & \dots & \dots & R_{1,x} \\ & = & R_{2,1} & & \dots & \dots & R_{2,x-1} \\ & & & & \dots & \dots & \dots \\ & & & & & & R_{x,1} = R \end{array}$$

Then the number of children alive at the end of the x th year is (from 1 pair of parents)

$$\begin{aligned} l_x &= f_1 R^x && \text{(aged } x-1 \text{ to } x) \\ &+ f_2 R^{x-1} && \text{(aged } x-2 \text{ to } x-1) \\ &+ \dots && \\ &+ f_x R && \text{(aged } 0 \text{ to } 1) \end{aligned}$$

begotten by parents who have completed x years of married life.

Now we are given the number of marriages in their x th year, and the number of children alive of marriages in their x th year.

Let l_x = number of children alive from parents in their x th year of marriage.

m_x = number of parents in their x th year of marriage.

Then $l_x = m_x \times l'_x$

$$\therefore \frac{l_x}{m_x} = f_1 R^x + f_2 R^{x-1} + \dots + f_x R. \quad (A)$$

Take the values of l_x and m_x from the tables.

For the 0th recorded year of marriage $x=1$

„ 1st recorded year of marriage $x=2$
and so on.

$(f b)$ = total number of children born to parents now in their x th year of marriage.

$$b_x = m_x (f_1 + f_2 + \dots + f_x)$$

$$\frac{b_x}{m_x} = f_1 + f_2 + f_3 + \dots + f_x \quad (B)$$

If we go back to the general expression (1) we have successively, by putting $x = 1, 2, 3, \dots$

$$\frac{l_1}{m_1} = f_1 R_{1,1}$$

$$\frac{l_2}{m_2} = f_1 R_{1,1} R_{1,2} + f_2 R_{2,1}$$

$$\frac{l_3}{m_3} = f_1 R_{1,1} R_{1,2} R_{1,3} + f_2 R_{2,1} R_{2,2} + f_3 R_{3,1}$$

$$\frac{l_x}{m_x} = f_1 R_{1,1} R_{1,2} \dots R_{1,x} + f_2 R_{2,1} R_{2,2} \dots R_{2,x-1} + \dots + f_x R_{x,1}$$

This gives us x equations to solve $\frac{x(x+1)}{2}$ unknowns

$$\begin{array}{ccccccc} R_{1,1} & R_{1,2} & R_{1,3} & \dots & R_{1,x} \\ R_{2,1} & R_{2,2} & R_{2,3} & \dots & R_{2,x-1} \\ & & & & R_{x,1} \end{array}$$

The 'f's' are given by equations (B).

Now it seems reasonable to assume that the survival rate of children in the x th year of age born in the m th year of marriage of their parents, is equal to the general survival rate for the n th year of age multiplied by a factor depending only on the duration of marriage at the time of birth.

We then have

$$R_{m,n} = K_m R_n$$

Thus we get

$$\left. \begin{array}{l} \frac{l_1}{m_1} = f_1 K_1 R_1 \\ \frac{l_2}{m_2} = f_1 K_1^2 R_1 R_2 + f_2 K_2 R_1 \\ \frac{l_3}{m_3} = f_1 K_1^3 R_1 R_2 R_3 + f_2 K_2^2 R_1 R_2 + f_3 K_3 R_1 \\ \dots \\ \frac{l_x}{m_x} = f_1 K_1^x R_1 R_2 R_3 \dots R_x + f_2 K_2^{x-1} R_1 R_2 \dots R_{x-1} \\ \dots \\ + f_x K_x R_1 \end{array} \right\} (C)$$

We may now put in (C) the actual survival rates for the general population R_1, R_2, \dots, R_x and the values of the f's determined from (B), and we have x equations to determine the x unknowns $K_1, K_2, K_3, \dots, K_x$ which give the influence of duration of marriage at birth on the survival of the children at all ages.

If we call L_x the number living at age x according to table P of the actuarial Report for the Census of 1911 (p 187) in our notation

$$R_x = \frac{L_x}{L_{x-1}}$$

So the values of R_1, R_2, \dots, R_{10} , should be found from this table and then substituted in equations of type (C).

To start with take all groups together. From Table P, Life Table Punjab, males page 187, Census of India Report 1911, vol. I, part I, the survival rates R are given by subtracting the percentages in col. 4 from 100 and expressing as a decimal, i.e.,

$$\begin{array}{ll} R_1 = .7021 \\ R_2 = .9061 \\ R_3 = .9323 \\ R_4 = .9503 \\ \text{etc.,} & \text{etc.} \end{array}$$

The f's are determined from equations (B) and taking the fertility for the first ten years only, equations (C) then give 10 equations for the 10 unknowns K_1, K_2, \dots, K_{10} .

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M. N. K.

PREFACE.

IN this report will be found a very brief account of the manner in which the census was taken, and at greater length an explanation of the statistics based on it, and some examination of the conclusions which may be drawn from these. It is well to state, in view of misapprehensions which have arisen on similar occasions in the past, and may arise again, that the conclusions put forward, and any opinions expressed in the course of their presentation, are the conclusions and opinions of the writer, and in no sense those of Government.

It should also be emphasised at the beginning that the writer is a layman and not an expert statistician, and that he only claims for his conclusions the value which this remark implies. An engineer who has made a serviceable culvert is directed to build a bridge. A member of the Indian Civil Service, who has for a few years kept some sort of order among a quarrelsome people, is in effect told that he should by now have learnt thereby how to write a treatise on binetallism, and to set about doing so. The reader (if any) may well ask "Since you are no expert, why attempt to draw any conclusions at all?" My excuse can only be—if I do not content myself with setting up precedent as a defence—that the qualified statisticians who pounce upon all census matter will find it easier to attack a propounded thesis than to deal merely with the uninterpreted figures. I found this myself, and herein lies my justification for tilting at many of the views of my predecessors in office, Mr. Burn and Mr. Blunt, towards whom I should feel nothing but gratitude for the guidance that their work has given me. Ingratitude, however, is proper to criticism: as witness the distinguished German scholar, trained by an even more distinguished and scholarly father, who in editing a classical text mentioned an alternative to his own reading with the comment "*putidissime pater meus.*"

There were 308,092 enumerators, 28,568 supervisors and 1,215 charge superintendents in the province.

The training of the staff.

3. After appointing the census staff the next step was to train it. Simple though the schedule appears, there are few who until orally trained can fill it up without making mistakes. I trained the District Census Officers myself. They trained the charge superintendents, who in turn trained the supervisors. These made the best they could of the enumerators. The difficulty was at one end of the scale to convince that training was necessary, and at the other to persuade that it was possible.

The preliminary record.

4. When trained the staff was ready to make the preliminary record. This consisted in filling up the schedules for the ordinary residents of each house. The information recorded in the schedule consisted of name, religion, sex, age, civil condition, caste, occupation, mother tongue, birth place, literacy or illiteracy, literacy or illiteracy in English, and certain infirmities. This record was made in rural tracts between the 4th and 21st February, 1921, and in urban areas ten days later. It was generally made first on plain paper, and not copied into the printed forms until it had been corrected by the supervisors. The period from the completion of this record till the actual census was utilized in checking the entries, in which task the help of every available officer of Government was enlisted. The principal objects of checking were to see—

- (1) That every place where it was reasonably possible that a human being might take his evening meal on the 18th March was numbered as a house;
- (2) That every numbered house was accounted for in the schedules;
- (3) That the entries in the schedules were correct both in form and substance.

Much of this checking was possible, and was actually done, throughout the cold weather. And it was done up to the day of the census on such a scale that, generally speaking, inaccuracies can only have been rare.

The final census.

5. The actual census was taken between 7 p.m. and midnight on the 18th March, 1921. Each enumerator visited in turn every house in his beat and brought the record up to date by striking out the entries relating to persons no longer present and entering the necessary particulars for all newcomers. An incident at this stage illustrates the conscientiousness with which census work was generally done. An enumerator in Sitapur, who had a very small block, and who started on his final round punctually at 7, found that he had completed it by 7-10. But he understood his orders to mean that he was to repeat the round till midnight. He therefore visited every house again and enquired at each whether any one had died since his last visit. After his fifth round he had lost much of his popularity; after his tenth he was waited on by a deputation which urged him to go to bed; after his fifteenth he was served with a formal warning by the oldest inhabitant; and after his twentieth the muhalla turned out with staves and incapacitated him for further activity.

Another case of sacrifice to duty.

Special arrangements were made for the enumeration of travellers. Those on the roads were stopped at posts established every few miles. Those on trains were enumerated on arrival or departure at a station, if they were found not to have been enumerated already; and all trains were stopped at 6 a.m. on the 19th March, and any passengers who remained unaccounted for were then dealt with. Travellers by boat were caught at the ghats, where posts were located to enumerate them.

The provisional totals.

6. The provisional results were obtained as follows. On the morning after the census the enumerators of each circle met their supervisor and added up their totals, which after being checked were entered by the supervisor in a summary for his circle. The supervisors then met their charge superintendents, who prepared a charge summary similarly, and sent it to district headquarters. There provisional totals for the district were compiled and wired to me. As usual, the arrangements for getting in their charge summaries were worked out with the greatest care by District Census Officers, every known means of conveyance except aeroplanes being employed. Rampur

State, as before, was first in with its totals, which I received at 7-2 a.m. on the 19th March. Muzaffarnagar's figures were received at 9-13 a.m. Altogether seventeen districts and states wired their results on the 19th March and all figures were in by the 23rd March. I wired the provisional totals to the Census Commissioner on the afternoon of that day.

The provincial total differed from the figures arrived at after tabulation by +215,102 (+ '5 per cent.). The difference would have been negligible but for an unaccountable mistake of 202,769 made by Meerut.

7. The opportunity of the census proper was used to take a wholly separate Industrial Census, designed generally to measure the extent of industrial development in the province and to ascertain the nature of the personnel connected with industrial concerns. This census was taken by means of two special schedules through the agency of an "Industrial Officer" (generally identical with the Census Officer) appointed for each district. A "Tenement Census," whose object was to gauge overcrowding in large cities and to collect certain other demographic matter, was also taken in the cities of Lucknow, Cawnpore, Allahabad and Benares.

*The
"industrial"
and "tenement"
census.*

8. The attitude of the public towards the census was less satisfactory than in 1911. Of course the old fantastic tales of its ulterior objects have long since been forgotten. But District Census Officers experienced much trouble and anxiety owing to the "non-cooperation" movement. The movement was negligible in rural tracts. But in many towns it resulted in—

*The attitude of
the public.*

(1) refusals by non-officials to act as census officers;

(2) refusals by heads of families to give the information necessary for the filling up of the census schedule.

This is the sort of thing that in India and Ireland passes for politics. In the Solomon Islands it would be called childishness. Both forms of recusancy were overcome with difficulty but with uniform success: the first by replacing the recusants by officials and by well-disposed members of the public, the second by methods on which it is unnecessary to enlarge. Though the movement, as I said, gave much extra work to all concerned, I am convinced that it did not affect at all the accuracy of the returns.

I may mention that as soon as the movement began to interest itself in the census the Local Government, at my instance, instructed District Officers to prosecute recusants as a matter of course: and in those districts where this instruction was carried out promptly, no further trouble was experienced. I would also mention, in justice to the way in which District Census Officers coped with their difficulties, that a pronouncement made a few days before the final enumeration by the leader of the non-cooperation movement that non-cooperators were not to interfere with the census, was made much too late to have any effect one way or the other.

I am grateful to the well-disposed section—far the larger section—of the public, which showed the helpfulness which in normal times is characteristic of the people of the province. But the census of 1921 was, largely speaking, the gratuitous work of the servants of Government, who carried it through in their spare time.

9. For tabulation the slip system of Dr. Georg von Mayr was used as in 1911. Each person enumerated had a separate slip, on to which were copied the details recorded of him in the schedule. The task of copying was simplified by the use of different colours for different religions, of printed symbols to indicate sex and civil condition, and of prescribed abbreviations. The slips when prepared were then sorted for each final table in turn; after sorting his slips the sorter entered his totals on a "sorter's ticket"; and on completion these totals were entered in a register and added up to form the district totals. From the district totals the final tables for the whole province were compiled in the head office.

*The tabulation
of the statistics:
system.*

10. The bulk of the copying was done locally in the districts in the period between the preliminary and final enumeration. It was not so done in the hills, where geographical difficulties were too formidable, in the States, in the Muzaffarnagar district, where the revenue staff was preoccupied with settlement operations, in the cities (except Lucknow), or in a proportion of the towns. The patwaris acted as copyists, except in Lucknow city, where the agency was the municipal enumerating staff. This was an innovation

*How carried
out.*

INTRODUCTION.

and as such and because it was decided upon rather late, involved a disproportionate amount of labour for many people including myself. But with improvements dictated by experience the experiment is worth repeating, if only for the indirect advantage of increased accuracy in the records: for the copying being almost always done by a man personally acquainted with the people with whom he was dealing, mistakes were detected and removed on the spot. A comparison of the difficulties experienced in sorting the Muzaffarnagar slips with the comparative ease enjoyed in dealing with those of other districts has been enough to convince me of the value of local copying.

What remained of the copying, the sorting, and the compilation was done at seven central offices—at Saharanpur, Lucknow, Jhansi, Fyzabad, Gorakhpur, Bareilly and Naini Tal. The location and indeed the number of offices was determined by the availability of office accommodation. Each office was under a deputy superintendent selected from the ex-District Census Officers. The staff for each office consisted of a head assistant, record-keeper, accountant, four or five inspectors and a varying number of supervisors in charge of gangs of copyists, sorters, or compilers. It was never possible to maintain the rank and file at full strength: at their maximum copyists numbered 1,758 and sorters 2,002.

Copying was finished on the 30th April, 1921 (for most offices considerably before this), sorting between the 30th June (Fyzabad office) and the 17th September, 1921 (Lucknow office), compilation between the 24th September, 1921, and 7th January, 1922 (Lucknow office). All offices except those at Lucknow and Bareilly were closed or practically closed by the middle of October: the delay at Lucknow was due to the intricate statistics prepared in connection with the Tenement Census. The head office meanwhile had begun the tabulation of the final tables.

The report.

11. I found it impossible to start writing the report till towards the end of October 1921: before then I had not the complete material for any one chapter. It is a mere pamphlet compared with the treatise of 1911. A short report was dictated by the present-day cost of paper and printing combined with the declared financial embarrassments of Government. Personally I wish I could have made it shorter. I have confined myself ordinarily to bringing out the salient changes and developments suggested by the figures to have occurred since the last census, eschewing anything in the nature of a monograph on particular aspects of the subject-matter of the several chapters. What has been said or explained in previous reports is taken for granted.

The cost of the census.

	Rs.	
(1) Net expenditure for 1920-21.	1,08,511	is shown in the margin, and is unlikely to be exceeded. It averages Rs. 9·5 per 1,000 of population. In 1911 it averaged Rs. 5·9 and in 1901 Rs. 5·1. The expenditure has been cut down by speeding up the work of the central offices, and by reducing the length of the report. On the other side the increased cost of personnel and material does not need to be enlarged upon. The larger payments to personnel I do not apologise for: indeed I think they were inadequate. The higher prices of material were beyond my control.
(2) Anticipated expenditure, 1921-22	3,12,597	
(3) Anticipated expenditure, 1922-23	21,102	
Total, 1920-1923.	4,42,210	

Acknowledgements.

12. The cost of the census of the province will be dealt with in detail in the Administrative Report. The anticipated cost

13. I conclude with acknowledgments to those who assisted me: firstly to the District Magistrates, who one and all thought the census an intolerable nuisance and said so with considerate infrequency: principally to the District Census Officers, of whom it would be the easiest course to mention the one or two who did not give me complete satisfaction. Apart from those afterwards selected to be deputy superintendents the best work was perhaps done by Mr. M. H. B. Nethersole, D.S.O., I.C.S. (Shahjahanpur), M. Muhammad Shafi Khan (Lucknow), P. Kishan Nand (Bareilly), Ch. Ram Chand (Ghazipur), P. Chandra Shekar Misra (Ballia), M. Muhammad Mushtaq Ali Khan (Budaun), S. Muhammad Abbas Zaidi (Partabgarh), P. Gyan Nath Raina (Etawah) and Sh. Imam-ud-din Hyder (Fyzabad). I mention also particularly Mr. H. S. Bates, I.C.S., who starting with only a few weeks' experience of India made an excellent job of the Jhansi district. But the work of almost all was excellent.

The seven deputy superintendents were Mr. W. R. Tennant, I.C.S. (Naini Tal), M. S. Ijaz Ali (Bareilly), B. Jamna Sarup (Jhansi), M. Abdul

Wahid Khan (Lucknow), S. Muhammad Zahid (Saharanpur), Th. Mahendra Pal Singh (Gorakhpur) and P. Ganga Charan (Fyzabad). Of these, Th. Mahendra Pal Singh, B. Jainna Sarup and (after a slow start) S. Muhammad Zahid did admirably. My indebtedness to Mr. Tennant calls for separate mention. During the cold weather of 1920-21 he was my personal assistant and relieved me of much of my touring and inspection work. After March 1921 he took charge of the Naini Tal Central office, and at the same time gave me the greatest possible help in many other ways. In particular his mathematical training and his *flair* for statistics have been invaluable, especially to one whose acquaintance with figures does not extend beyond mental arithmetic. In conclusion I wish to acknowledge the invariable helpfulness of Mr. Abel, Superintendent of the Government Press, and of Major F. W. Hart, Superintendent of the Photo-Mechanical and Litho. department, Thomason College, Rurki.

Chapter I.—DISTRIBUTION AND MOVEMENT OF THE POPULATION.

1. The territory dealt with in this report is that administered by the Government of the United Provinces of Agra and Oudh, together with the States of Rampur, Tehri-Garhwal and Benares. The whole is in shape roughly a parallelogram, about 500 miles long by 175 miles broad, running from north-west to south-east, and comprising the Indo-Gangetic Plain and submontane tracts: with one irregular annex on the north-west (Himalaya, West), and another, the trans-Jamna tract (Central India Plateau and East Satpuras) on the south. This territory is in area 112,440 square miles (94 square miles more than in 1911¹), of which 106,491 square miles are British and 5,949 fall within the States. To give some idea of the size of the Province, it may be said to be a little smaller than the British Isles, with which it is almost identical in population.

The area dealt with.

The British territory is divided into 48 districts, each in area roughly corresponding to the larger English counties. These are grouped into ten administrative divisions, of which two constitute Oudh and eight the province of Agra, as shown in the imperial tables. One of these divisions—Jhansi was formed shortly after the last census, the districts of Jalaun, Jhansi, Hamirpur and Banda being taken from the Allahabad division for the purpose; at the same time Allahabad was compensated with the districts of Farrukhabad and Etawah taken from Agra, to which Meerut ceded Aligarh. On the 1st April, 1911, and also after the last census, the Benares State was created at the expense of the district of Mirzapur (864 square miles) and Benares (5 square miles). These re-arrangements need to be borne in mind when the imperial tables of 1911 and 1921 are compared: and to render any comparison exact reference should be made to the appendix to the provincial volume of 1911, in which are exhibited the chief changes caused by them in the statistics.

In the subsidiary tables printed at the end of each chapter in this report the administrative districts are grouped not by administrative but by "natural" divisions. The natural divisions are the same as those used in the reports of 1901 and 1911, and are based on differences mainly geological, but also agricultural, linguistic and ethnological, so far as these differences go together. To make such a grouping complete it would be necessary to adopt a unit smaller than the district. The Allahabad district, for instance, is shown as lying within Indo-Gangetic Plain, Central, though three of its tahsils belong properly to Central India Plateau, and its north-easterly corner should strictly be included in Indo-Gangetic Plain East. Naini Tal again, shown as in Himalaya West, is very largely submontane. But to use a smaller unit than the district would be impracticable, and the grouping with admitted limitations corresponds to differences of general character.

(1) Details of the small change in area since last census are shown below in tabular form.

District.	Area added to province (square miles).	Area subtract- ed from pro- vince (square miles).	Population in 1911 of area affected.	Cause of transfer.
Muzaffarnagar	.	20	1,119	Changes in deep stream of Jamna.
Meerut	.	46	15,179	To go to form new Delhi Province.
Ballia ..	7	28	5,213 4,865	} Changes in deep stream of Gauges.
Pilibhit	806	603	Nil	
				Realignment of Nepal frontier.

NOTE.—Insignificant areas subtracted from the Saharanpur and Bulandshahr districts owing to changes in deep stream of the Jamna and from Cawnpore by diluvion have been omitted.

Natural division.	Percentage		which the reader after detailed information is referred. They are enumerated in the margin, each with its percentage of the provincial area and population (British territory only). Here the briefest possible outline of their characteristics will suffice. Himalaya West includes, besides a tract of submontane country, the whole of that portion of the Himalayas which falls within the province,
	of provincial area.	of provincial population.	
(1) Himalaya, West ..	14.00	3.30	
(2) Sub-Himalaya, West ..	9.50	8.90	
(3) Indo-Gangetic Plain, West ..	22.50	26.80	
(4) Indo-Gangetic Plain, Central ..	21.20	20.30	
(5) Central India Plateau ..	9.80	4.60	
(6) East Satpuras ..	4.00	1.60	
(7) Sub-Himalaya, East ..	12.00	17.00	
(8) Indo-Gangetic Plain, East ..	7.00	11.50	
United Provinces (British districts) ..	100.00	100.00	

extending from the bare region of perpetual snow to the densely wooded Siwalik hills. Forests cover most of this country, which is thinly populated and cultivated only in infrequent patches. Below this tract and the mountains of Nepal further east is a submontane belt, within historical times almost entirely under forest, and even now largely afforested, but densely populated where the jungle has been reclaimed. Sub-Himalaya West and Sub-Himalaya East comprise this belt. On the extreme south, and bounded on the north by the Jamna river, and by the Ganges after its confluence with the Jamna, is a tract (Central India Plateau and East Satpuras) whose geological characteristics are determined by the low mountain ranges of Central India. It is intersected by the outlying spurs of these ranges, is largely jungle-clad, and is characterised by an unkindly climate and soil. The population here is naturally sparse. Between this trans-Jamna tract and the submontane belt lies the Gangetic Plain—Indo-Gangetic Plain, West, Central and East¹—a level featureless expanse of unenclosed cultivation, densely populated, interspersed with unprofitable cities, a country of unrelieved vistas of field upon field, of dust, and of dullness unspeakable.

The States are shown—in these subsidiary tables—apart from the arrangement of natural divisions, but they are in no way homogeneous. Rampur would, but for administrative and political considerations, be included in Sub-Himalaya West, Tehri-Garhwal in Himalaya West, and Benares in East Satpuras.

2. So much for the area dealt with. Before proceeding to discuss the population of that area it will be well to state precisely what is meant by the word "population" as used in this report. The population of any place or area may mean one of two things—

- (1) the sum of the people found present in that place or area at a particular moment of time—the so-called *de facto* population, or
- (2) the sum of the people ordinarily resident in that place or area—the so-called *de jure* population.

The object of the Indian census (unlike for instance that of the census of the United States) is to ascertain the *de facto* population, and that object has been attained in this province except to some extent in the Himalayan tract: where owing to the great distances and difficult terrain involved, it was impossible to take the final census on one night, and the operation had to be spread over a period of ten days. In this tract the figures to some small extent represent the *de jure* population; for many of the hill people are of migratory habit, especially at the seasons of climatic change, and some of those dealt with at the beginning of the enumeration period will have moved elsewhere before the end of it. Subject to this limitation, however, the "population" of a territorial unit means in this report the sum of the people found in that unit on the night of the 18th March, 1921.

The *de facto* population is in the case of this province, largely speaking, also the normal population; for the people are little addicted to movement. There are however small factors which upset the correspondence. In the first place travellers, who were enumerated wherever found, whether on the roads, in boats, waiting at railway stations, or in railway trains, ordinarily go to swell the population of places with which they have no connection. The numbers involved are negligible except in the case of railway trains. A train may carry about a thousand people, and where one or two trains were dealt with by

¹ To which I shall generally refer in future as the Western, Central and Eastern Plain respectively.

The population dealt with, and the completeness of the enumeration.

the enumerators at one place—as happened in Aligarh City—the recorded population, and especially the recorded proportion between males and females, may be consequently abnormal. Secondly, fairs may attract to a place people who are wholly alien to it. This fortunately did not happen on any large scale at the present census, except at Misrih in the Sitapur district. Thirdly, the hill stations are only beginning to fill in the middle of March, and are then neither in their normal winter state of emptiness, nor in their normal summer state of congestion. Fourthly and lastly the cultivators and graziers of the sub-montane tract of the Naini Tal district were, at the time of the census, still in process of migration to their summer quarters in the hills of the same district and of Almora.

With these exceptions however—which are trifling in relation to the forty-six million inhabitants of the province—the *de facto* and normal population correspond.

The question how far the enumeration is accurate, so far as the correctness of the entries made in the census schedules is concerned, will be considered in the course of the chapters which follow. Here it is only necessary to estimate how far it is complete. A synchronous census—that is to say a simultaneous counting of all the people—could only be absolutely complete if a universal parade were ordered and enforced for the purpose—the method probably followed by David and the other early Census Superintendents.¹ It cannot obviate omissions when every one is left free to go his own way and to follow his own pursuits, and has to be run to ground by the enumerator wherever he may be and whatever he may be doing. Under these circumstances to calculate the chance of any one person's being enumerated, though arrangements may be so perfected as to make it overwhelmingly probable, involves the solution of two personal equations. But I believe that the present enumeration has been as complete as it is humanly possible to make it. With the mass of previous experience which is now at his disposal, and with an enumerating staff of which a large part is already familiar with the process of census-taking, a Census Superintendent finds the methods of overcoming old difficulties already tested and approved, and has plenty of time to deal with new difficulties—such as the “Non-cooperation” movement—as they arise. Moreover the system of checking and supervision has been perfected in previous censuses, and makes it hard for any one to escape the census net. The only exception I would make to this generalisation is as regards Europeans. I have no doubt that an appreciable number of these were not enumerated at all. The method of enumerating them is unsatisfactory, and it would be preferable, in my opinion, to deal with them on a *de jure* rather than on a *de facto* basis.

3. Density is the correlation of population with area. The population of the province is 45,375,787; of the States 1,134,881; and of the whole area dealt with 46,510,668. This, as has been noticed already, is roughly the population of the British Isles also; and as their areas do not differ greatly, it follows that the densities of the two countries are much alike. But though to compare the United Provinces with the British Isles in area and population serves to give some idea of the size of the former, to compare the densities of the two countries is altogether misleading. Indeed to speak of the density of a country as a whole is in itself absurd. The density of the British Isles is the mean of the densities of London County and of Sutherlandshire and of all the urban and rural areas between these two extremes. The density of the United Provinces includes the densities of the Himalayan snows and of the “pakka mahals” of Benares city. The figure is 414. It means nothing.

If the population of the British Isles and of the United Provinces is almost identical the distribution of that population in the two countries could not be more unlike. Here 89·4 per cent. of the population is rural and 10·6 per cent. is urban. In the British Isles the percentages are not far from being

*Density and
distribution:
General.*

¹ The Roman Emperors who from Augustus onwards held a regular census of the Empire—apparently at intervals of fourteen years—made things very easy for their administrative staff. The census was not synchronous. And a parade was held by households (κατ'οικίαν ἀπογραφή) everyone being ordered to return to his original home for the purpose. On this subject, and the principle of “*idia*”—the liability of every Roman subject to be ordered back to his original home—see St. Luke II. 1-5 and Sir William Ramsay “The Bearing of Recent Discovery on the Trustworthiness of the New Testament” chapters XIX and XX.

transposed.¹ Distribution in this aspect will be dealt with more fully in the next chapter.

*Variation :
the degree
thereof to be
accounted for.*

4. The variation in the population during each of the last five decades, and during the whole period of fifty years, 1872 to 1921, is shown in the margin.

Variation.		Increase (+)		Decrease (—)	
1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.	1872 to 1921.
-1,486,696	-480,294	+796,371	+2,806,294	+2,250,985	+3,886,660

The area dealt with at each census was to all intents and purposes the same. The enumeration is believed to have been incomplete and inaccurate before 1891, but the increase of population found at the census of 1881 is unlikely to have been underestimated: for the census of 1881 must have been at least as complete as that of 1872. Much of the increase found in 1891 was due probably to improved methods of enumeration, but the previous decade was prosperous and immune from serious calamities. Between 1891 and 1901 there was a diminished increase, the diminution being due to a series of famines, and the increase having taken place in spite of them. The decrease that occurred during the decade 1901 to 1911 is attributed by Mr. Blunt to the famine of 1907-8, to the malaria epidemic of 1908, to plague, and to emigration. The influence of emigration is very doubtful; I confess that I cannot follow Mr. Blunt when he argues, against the evidence of his own figures, that the volume of emigration had increased since the previous decade. On the other hand the ravages of plague had been immense. The recorded mortality from this cause was 1,351,252. The actual mortality was probably much greater, for plague was then a new disease, and created panic wherever it appeared; and in times of panic such precarious arrangements as those for recording the vital statistics very easily break down. The malaria epidemic of 1908 also caused enormous loss: the recorded death rate of that year was over 52 per mille, while the annual rate for the whole decade was less than 40; and reported deaths from fever exceeded the normal by nearly three-quarters of a million. It is most reasonable to suppose that the loss of population found in 1911 was due to two unusual calamities—a new disease (plague) and an exceptionally severe epidemic of malaria.

Mr. Blunt gave reasons for estimating the normal rate of increase for this province at something over 3 per mille per annum. A normal period here does not connote of course freedom from calamity, but freedom from unusual or exceptional calamities. The estimate appears just; and this very abnormal decade provides no new material by which to revise it. In the chapter on Age, I attempt to show that the population is in essence "progressive", and still possesses all the factors necessary to the maintenance of its normal rate of increase. It has on the other hand decreased since 1911 by over 3 per mille per annum. There is thus for the decade not only an absolute decrease of over 3 per cent. to be accounted for, but also a decrease of over 6 per cent., or of about three millions, relatively to the normal rate of expansion.

*The vital
statistics :
their value in
this
connection.*

5. Having stated the problem, it is natural to turn to the vital statistics for help in the solution of it. I may as well state at once that in my opinion little help is forthcoming from this source, and that the statistics can at best be used only for comparative purposes. The absolute figures that they furnish are quite unreliable. The marginal statement shows the reported births and deaths (British territory only), and the difference between them, for the decade². According to this statement the province has gained in population by 957,000. It has in fact lost by 1,432,000. The "calculated" population therefore exceeds the actual by 2,389,000. Some part of the difference is accounted for by the

	Births	Deaths.	Excess of births (+) or of deaths (-).
1911	2,053,324	2,105,292	- 51,968
1912	2,125,585	1,400,807	+724,778
1913	2,332,999	1,631,693	+601,306
1914	2,104,554	1,567,266	+537,288
1915	2,086,121	1,406,743	+679,378
1916	2,017,756	1,381,299	+636,457
1917	2,157,642	1,774,896	+382,746
1918	1,867,844	3,856,762	-1,988,918
1919	1,516,497	1,951,662	-435,165
1920	1,664,192	1,742,835	- 78,643
Total 1911-20	19,776,514	18,819,255	+957,259

¹ The Preliminary Census Report for England and Wales, 1921, shows 79·3 per cent. of the population to be urban, and 20·7 to be rural. The figures for Scotland will not affect the proportion appreciably. The definition of "urban population" adopted for the British Isles differs from that adopted here, but the contrast made in the text would hold good on any definition.

² To be exact, for the period 1st April, 1911 to 31st March, 1921, which corresponds to the intercensal period (11th March, 1911, to 18th March, 1921) sufficiently for practical purposes.

balance of emigration over immigration—how much will be discussed later.¹ But the bulk of it can be due only to inaccuracy in the vital statistics.

The statement shows on balance a small decrease of population in 1911, a very large increase in each of the next five years, a diminished but still a large increase in 1917, and decreases, vast in 1918, very large in 1919, and appreciable in 1920, for the remaining three years. Now excluding for present purposes the last three years of the decade, which were in varying degrees abnormal (1918 superlatively so), the net increase for the first seven years amounted to 3,460,000, which on a population of 48 millions gives an approximate rate of over 10·5 per mille per annum. This is within a fraction of Germany's annual rate of increase during the period 1870—1900, and is incredible in view of all that is known about this congested province, and in respect of a period unmarked by any industrial or economic expansion.

The method by which births and deaths are reported has been described in previous reports, and need not be described again. The reporting agency for urban areas is probably adequate for the obtaining of reasonably accurate results. But this agency deals only with about 10 per cent. of the population. For rural tracts reports are made solely by the village watchman, and it would be astonishing if reliable statistics could be secured through the agency of this underpaid drudge. His statistical work is checked by the vaccinators and by "superior officers." Mr. Blunt remarks that the latter find about 2½ per cent. of omissions (for both births and deaths), and the former much less. The vaccinators, as Mr. Blunt admits, are not concerned to find mistakes. The superior officers in practice generally delegate their testing to a clerk. Even where an officer himself tests the reports, it is, as I know from experience, exceedingly hard to do so satisfactorily, especially in respect of deaths. After the lapse of time villagers do not readily remember deaths; births they remember more easily, for the children born are there to remind them. And though doubtless many watchmen are careful and conscientious in their reporting, those who are careless are never, to the best of my belief, punished for their neglect; nor would it be easy to punish an official whose monthly pay is three rupees, out of which emolument he has to find his own uniform.

Everything points then, if the above reasoning is correct, to a large understatement of deaths in the vital statistics of normal years. The understatement is exaggerated in abnormal years to an extent varying with the nature of the abnormality; but a consideration of this subject may conveniently be postponed till after the general conditions of the decade have been examined.

6. Though it would be in the highest degree unsafe to treat the absolute figures given by the vital statistics as evidence of the amount by which in any given year births exceeded deaths, or deaths exceeded births; yet there can be no reasonable doubt that these statistics reflect in broad outline the influence exerted on the population by the general conditions of the decade. There can be no doubt, for instance, on the evidence of the vital statistics alone, that the year 1911 was unfavourable and that the following six years were favourable to expansion (the last much less so than the preceding five years), that the year 1918 was disastrous, and that the years 1919 and 1920 were disastrous also, though to a diminishing extent. It should be possible therefore, for all but very abnormal years, to use the statistics to gauge the extent to which the people were affected by the general conditions of those years.

These conditions so far as they affect the population fall under four heads—Agriculture, Prices and Wages, Trade, and Public Health. The very brief account now given under each of these heads is summarised from the Annual Administration Reports.² I mention this fact lest it be supposed that the account is coloured to support the obvious but important conclusion drawn from it.

Agriculture.—The year 1911-12 was agriculturally an excellent one. The autumn (*kharif*) crops were indifferent, but were followed by a bumper spring (*rabi*) harvest. In 1912-13 both harvests were normal.³ The monsoon of 1913

The influence on the population of the general conditions of the decade as gauged by the vital statistics.

¹ And about 16,000 by transfer of territory. This trifling has been neglected in the text.

² To which the reader should refer for detail. These works are perious heavy reading, however, and only the stouthearted should attack them as well as this report.

³ I use the word "normal" where it is used by my authority, but it should be pointed out that in local agricultural reports it generally understates the facts. District estimates of a crop are made, by rule, in terms of annas

failed. The cropped area in 1913-14 was short by $2\frac{1}{2}$ million acres and both harvests were very poor. Famine was declared in the Jhansi division, and "scarcity" in Rohilkhand and parts of the Agra and Allahabad divisions. Lucknow, Fyzabad and Meerut also suffered severely. There was a recovery in the following year, but neither crop of 1914-15 was good. Those of 1915-16 were better, the harvests of 1916-17 were very good indeed, and of 1917-18 only slightly less good. A bad monsoon in 1918 resulted in a very poor *kharif* and an indifferent *rabi*. Distress was general, but acute only in the Etawah district. The following rains erred only on the side of excess, and the harvests of 1919-20 were reasonably good. Those of 1920-21 were poor.

Let this summary and the last marginal statement be considered together. I cannot find any correlation.

Prices and Wages.—There was no appreciable movement in prices and wages in 1911-12. In 1912-13 began that rise in prices which has continued ever since. Wages however did not respond till the following year, and would not probably have responded so soon had there not been an exceptional demand for labour. In 1914-15 the prices of commercial crops fell, but the fall was due to the dislocation of trade caused by the outbreak of the war, and was temporary only. It was fully made good in 1915-16, but prices generally, owing to the same cause, were unsteady in that year. A high level was maintained throughout 1916-17, and a sharp rise in respect of cloth, metals, and salt, due to a contraction of imports combined with profiteering and speculation, counterbalanced to some extent the benefit accruing to the cultivating classes from the high prices of cereals. Prices rose still further in 1917-18: and the upward movement continued in 1918-19. It was checked in 1919-20, but wages rose abruptly, and the demand for labour was very keen: these two latter phenomena being obviously due to the heavy mortality in this and the previous year. The rise in prices was resumed in 1920-21.

No correspondence is traceable between these movements and the fluctuations of population indicated by the vital statistics.

Trade and Industries.—Trade in 1911-12 was excellent, and there were large increases in both exports and imports and in both volume and value. These increases were continued in 1912-13, there being in particular a very large export of grain and oilseeds in that year. Imports continued to expand in 1913-14 but exports decreased seriously. In 1914-15 trade declined generally, and especially in respect of exports. Exports recovered in the following year, but there was a continued decrease of imports. In 1916-17 this process was reversed. In 1917-18 imports again fell and exports again rose. Imports greatly increased in 1918-19, but exports decreased in volume though they increased in value. In 1919-20 imports fell both in volume and value: exports fell in volume but rose in value. There are no figures for 1920-21.

As a result of the operations of the decade, exports have increased in money value by over 50 per cent. but in exchange value it is clear that they have decreased.

Industries are on too small a scale to affect the population from year to year. The number of operatives employed in the principal industries of which statistics are maintained (cotton, sugar, indigo, lac, tanneries, flour and a few others) was some 34,000 at the beginning of the decade, and 52,000 at the end of it.

Once again, it is impossible to correlate the movement of population in any way with commerce.

Public Health.—The year 1911-12 was unhealthy. A severe epidemic of plague was by itself responsible for a mortality of 7 per mille. There was also a serious epidemic of cholera, and fever was much more prevalent than in normal years. By the following year cholera had almost disappeared, and plague and malaria had very much abated. Public health was good, and continued good in 1913-14. The same falls to be said of the years 1914-15, 1915-16, and 1916-17.

to the rupee, 16 annas to mean a normal crop, and anything more or less than normal to be expressed by a figure greater or smaller than 16. But to the subordinate revenue officials who prepare the estimates, and who have reason to know that the rupee is never worth more than 16 annas, a 16 annas crop means not a normal but the best possible crop. District estimates are therefore seldom based on the standard intended. I myself saw a harvest got in whose outturn was certainly twice the normal (the *kharif* of 1915 in Bundelkhand). The local report estimated 16 annas.

There was no serious or widespread epidemic in any of these years. Plague persisted but in a mild form and the prevalence of malaria was never more than ordinary. Health was less good in 1917-18. The normal plague epidemic of the cold weather took the abnormal course of persisting in the summer, and malaria was more prevalent than usual in the autumn.

The year 1918-19 is probably, in the matter of health, the worst on record. Apart from severe epidemics of plague and cholera, the province was devastated in the late summer and early winter by influenza, which swept over the country in two epidemic waves. In a few weeks this disease carried off, according to the estimate of the Sanitary Commissioner, about two millions of the population; but in reality, as I shall attempt to show later, many more. To enlarge upon this calamity is unnecessary. Every one witnessed it in some part of the world or another. Here many others must have seen, as I saw myself, villages that had in a month lost more than half their inhabitants, and great rivers choked with corpses which could not be disposed of in the ordinary way, if for no other reason, because the necessary fuel was exhausted. The damage done by this epidemic is not of course confined to the deaths for which it was directly responsible. According to medical opinion, between 50 and 70 per cent. of the people were attacked, and the sum total of the physical and economic damage done by the disease even where it was not fatal must have been enormous.

Influenza persisted in 1919-20, which was also a very unhealthy year. Though plague was negligible, there was a fairly severe epidemic of cholera, and a large proportion of the population had undoubtedly been left by the influenza epidemic of the previous year too weak to offer serious resistance to disease in any form. Public health was also unsatisfactory in 1920-21. The province was almost free from cholera and plague, but malaria was very prevalent.

Now let the conditions of the decade in respect of public health be considered together with the vital statistics, of which I reproduce the most relevant figures in the margin. It will be at once apparent, I think, that while these figures cannot possibly be correlated with either the agricultural, the economic, or the commercial conditions of the decade for instance, an examination of them could not suggest that there were bumper harvests in 1911, 1916, and 1917, and crop failure in 1913-14—correlation with disease is at once manifest and complete. The health conditions of the decade may be summarised thus—

Year.	Excess of births (+) or of deaths (—)
1911 ¹	— 51,963
1912	+ 724,778
1913	+ 601,906
1914	+ 537,288
1915	+ 629,378
1916	+ 636,457
1917	+ 332,746
1918	—1,988,918
1919	— 435,165
1920	— 78,643
Total .. 1911 —1920	+957,259

Healthy years	...	...	...	1912, 1913, 1914, 1915, 1916.
Less healthy year	...	...	...	1917.
Unhealthy years	...	...	...	1911, 1920.
Very unhealthy year	...	...	...	1919.
Excessively unhealthy year	...	...	...	1918.

This summary only needs to be compared with the marginal statement.

The conclusion of the whole matter is obvious, but so important that I may be pardoned for emphasising it. The population reacts extravagantly to conditions of health. And this reaction completely conceals any reaction there may be to agricultural, economic, or commercial conditions: which latter reaction, if it occurs at all, is so slight as to be negligible.² Possibly this may be true of all tropical countries. But it appears to suggest, what is also suggested by the population figures when examined from other points of view, that congested though the province may be, the limit of pressure of population on the soil is not yet in sight, and that in the absence of severe epidemics there is no present reason why the numbers of the people should not continue to increase.

7. The vital statistics have thus pointed the way to certain general conclusions, but give little help towards solving the problem set out at the beginning of this discussion—the problem of accounting for a loss of population of 3 per

*Variation:
how finally
explained.*

¹ This year is strictly 1st April, 1911, to 31st March, 1912, and so on for the others. The Administration Reports for 1911-12, etc. deal with the same periods.

² It would doubtless be very considerable but for the system of famine administration.

cent. relatively to the figures of 1911, and of 6 per cent. relatively to the normal rate of increase. The vital statistics show a gain of 2 per cent. for the decade.

If 3 per mille per annum be accepted as roughly the normal rate of expansion, which takes into account the balance of emigration over immigration, the population of the province (British territory only) should have increased by about 1,410,000. It has actually decreased by 1,452,000. The abnormal losses of the decade amount therefore to 2,842,000. If the year 1918 be excluded, the remaining nine years may I think be taken as on the average fairly normal. They include in a general series of reasonably healthy years and of reasonably good crops, two unhealthy and one very unhealthy year and two years of crop failure. It is probably then somewhere near the truth to hold the year 1918 accountable for the whole of the abnormal loss. Plague and cholera should not be responsible for more than the odd 42,000 of this.¹ The balance, 2,800,000, I would attribute wholly to the influenza epidemic.

The Sanitary Commissioner calculates deaths due to this epidemic to have numbered approximately two millions, or 800,000 less than my estimate. Influenza is not prescribed as a head under which reporting agencies are to classify causes of death. It was therefore returned as "fever." The Sanitary Commissioner arrived at his calculation in the following way: from the number of deaths reported in 1918 as due to fever he subtracted the average number reported in normal years; the remainder he attributed to influenza. This calculation would probably give a reasonably accurate estimate if it be assumed that the deaths that occurred during the epidemic were fully reported. But in fact they certainly were not. I have already given reasons for believing that the registration of deaths is by no means complete even in ordinary times. But during the autumn of 1918 the system of reporting broke down entirely, as indeed was inevitable.² The village watchman—always a man of no education and of less than average intelligence—could not be expected to keep track of deaths when these were occurring in tens and twenties every day. His duties constantly call him away to the police station, to the courts, or elsewhere: on his return after such an absence he might find half the village swept away, and if he managed to collect the names of all the dead, might fail to get any one to write them down for him. Lastly he will more often than not himself have sickened, and even if he recovered, will have been for some time incapable of carrying on his work. All things considered, 800,000 deaths may well have escaped registration during the autumn of 1918.

*Probable
degree of error
in vital
statistics.*

8. Of the difference of 2,389,000 between the actual and the calculated population, a sum of 800,000 is thus to be attributed to the breakdown of the system of mortuary registration during the influenza epidemic. The difference of 1,589,000 or say 1,590,000 that remains must be accounted for by the balance of emigration over immigration, and by incompleteness of the reports of deaths in normal times. The amount by which emigration exceeded immigration is dealt with in chapter III. It is difficult to gauge. It may perhaps be taken to be cancelled by the births that fail to be registered; inspecting officers find about $2\frac{1}{2}$ per cent. of omissions in the birth reports, and this amount of error would account for nearly half a million unregistered births since 1911. During the decade 18,819,255 deaths were reported: subtracting 2,000,000 of these as directly due to the influenza epidemic, there remain 16,819,255 or say 16,820,000 "normal" deaths. Unreported deaths numbering 1,590,000 out of a total of $(16,820,000 + 1,590,000 =)$ 18,410,000 actual deaths give a percentage of error in the registration of deaths of about 8 per cent.

*Summary of
conclusions so
far reached.*

9. The conclusions so far reached may now be summarised. Population after an initial setback in 1911 increased rapidly until the end of 1917, and has decreased enormously since. On balance it has lost during the decade nearly a million and a half of persons. The variation is due to disease, relatively to which all other influences are insignificant: to some extent to plague, cholera, and malaria, but overwhelmingly to the influenza epidemic. During this epidemic the system of mortuary registration broke down, and it is impossible to discover

¹ A normal year may be said nowadays to budget for an appreciable mortality from these two diseases.

² And as is also apparent from the absurd differences in the recorded death rates for the influenza period of contiguous districts, e.g., Gorakhpur 31, Basti 69, Azamgarh 81, Agra 159, Farrukhabad 136, Mainpuri 70.

directly where and to what classes of the population influenza dealt most havoc. The Sanitary Commissioner is of opinion that it was more deadly in the west than in the east, and to females than to males. Both these propositions cannot however be true: for relatively to males, females have since 1911 increased in the west, and decreased in the east. The census figures, on the other hand, bear out the Sanitary Commissioner's contention that the disease hit hardest persons of both sexes between the ages of 20 and 35. On these two points I anticipate conclusions arrived at in the chapters on Sex and Age. I anticipate also a finding propounded in the latter chapter in saying that as a result of the vicissitudes of the decade, the constitution of the population is now such as to be favourable to great expansion in the future.

Revenue Divisions and States.	Area in square miles.	Population.	Density.	Density of rural portions only (approximate).
1. Meerut Division ..	9,173	4,509,572	492	410
2. Agra ..	8,644	4,182,825	484	406
3. Rohilkhand ..	11,033	5,198,773	471	395
4. Allahabad ..	10,242	4,795,666	468	411
5. Jhansi ..	10,410	2,065,297	198	176
6. Benares ..	9,536	4,443,808	467	418
7. Gorakhpur ..	9,513	6,720,715	704	680
8. Kumaun ..	13,724	1,292,309	94	89
9. Lucknow ..	12,057	5,567,241	462	418
10. Fyzabad ..	12,101	6,599,401	545	524
British Territory ..	106,491	45,375,787	426	382
Itampur State ..	899	453,607	505	402
Tehri Garhwal State ..	1,180	318,414	76	76
Benares State ..	870	362,863	417	395
United Provinces ..	112,410	46,510,668	414	371

NOTE.—In calculating rural densities the density of urban areas has been taken as 15,000. Actual density of the 24 largest cities in 1911 was 16,500.

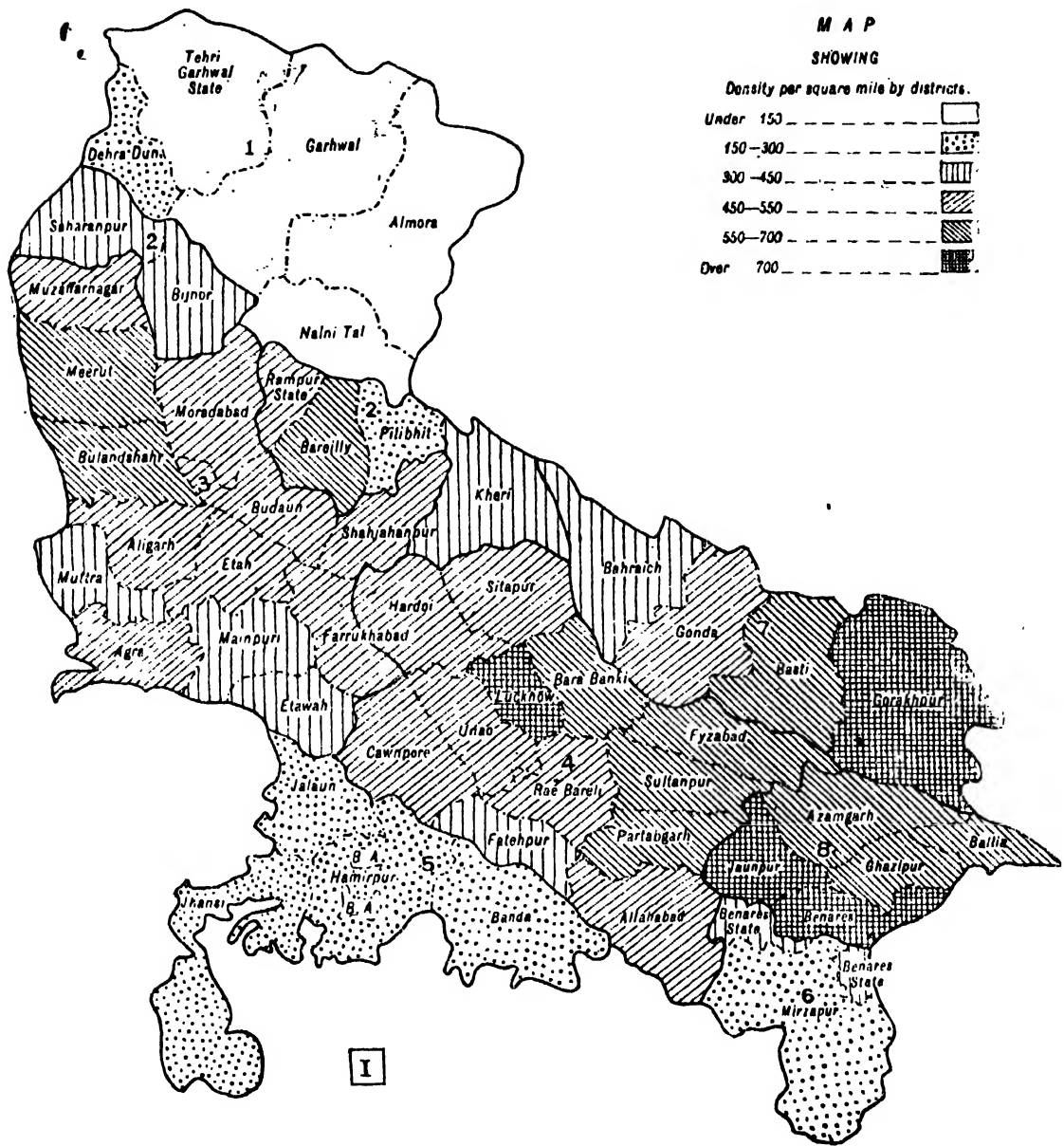
Natural Divisions.	Area in square miles.	Population.	Density.	Density of rural portions only (approximate).
Himalaya, West ..	14,911	1,504,642	101	92
Sub-Himalaya, West ..	10,117	4,036,604	399	341
Indo-Gangetic Plain, West	23,894	12,145,963	508	430
Indo-Gangetic Plain, Central.	22,596	11,923,193	528	477
Central India Plateau ..	10,440	2,065,297	138	175
East Satpuras ..	4,338	724,183	166	148
Sub-Himalaya, East ..	12,784	7,730,533	605	584
Indo-Gangetic Plain, East	7,381	5,248,372	711	648
United Provinces (British Territory).	106,491	45,375,787	426	382

10. It now remains to exhibit the local distribution of the population and to examine the local variation thereof. In the margin are presented two statements, showing the distribution by Administrative divisions¹ and by Natural divisions respectively. The map² printed below gives the distribution in terms of density in greater detail by districts.

Distribution and Density by Administrative and Natural Divisions.

¹ This is most conveniently inserted here but I do not deal with it further.

² For a key to this and subsequent inset maps, see the large coloured map facing the title page.



A full discussion of the historical, physical, and economic factors believed to determine this distribution will be found in the last report¹, to which I would refer the reader. I do not propose to examine this distribution in detail: it follows from what I have said above that, if my view is correct, density in the plains portion of this province is determined now by disease. In the not very distant past, before the system of famine administration had been evolved or perfected, it was probably determined also by famine, to which the east is far less liable than the west; and earlier still by yet a third factor—internal security.

In Mr. Blunt's discussion, to which I have just alluded, the most important

correlation attempted in this connection is that between density and crop statistics: and a very interesting calculation shows that for the plains portion of the province density varies, with one unimportant modification, directly as the percentage of gross cultivated (i.e. the double-cropped added to the net cultivated) to the cultivable area. I reproduce the figures. It is argued that the percentage determines density. I maintain that

Natural Division.	Percentage of gross cultivated to cultivable area.	Order of gross area.
Sub-Himalaya, West	437	101.4
Indo-Gangetic Plain, West	538	108.9
Indo-Gangetic Plain, Central	550	105.5
Central India Plateau	211	77.9
Sub-Himalaya, East	586	118.2
Indo-Gangetic Plain, East	706	107.2

¹ pp. 17 et seqq.

density determines the percentage. An increased density can only be supported, so long as the country is in effect wholly agricultural, by an expansion of this percentage. And under present conditions the density will continue to increase, so far as its increase is not checked by disease, until the limit is reached beyond which the percentage cannot expand. That this limit has not yet been reached is shown by the corresponding figures of the present time,¹ from which it is evident that the percentage is still

Nature Division.	Density.	Percentage of gross cultivated to cultivable area.	Order according to density.	Order according to gross cultivated area.
Sub-Himalaya, West ..	399	98.7	5	5
Indo-Gangetic Plain, West ..	508	103.7	4	4
Indo-Gangetic Plain Central ..	528	109.0	3	3
Central India Plateau ..	198	89.9	6	6
Sub-Himalaya, East ..	605	122.0	2	1
Indo-Gangetic Plain, East ..	711	110.8	1	2

capable of expansion even in the most congested divisions.²

In support of my argument I may mention the case of Gorakhpur, a district with which I happen to have a close personal acquaintance. This district has increased in density from 707 to 723. It consists of six tahsils. The headquarters tahsil has the highest density, followed closely by Hata. The Maharajanj tahsil, with much jungle and undeveloped land, has far the lowest density. The headquarters tahsil has now increased in density by six, Hata by five (two units more than any other tahsil), and Maharajanj by one. Maharajanj is reputed to be far the most unhealthy tahsil in the district. Again, in Bundelkhand (Central India Plateau), with parts of which I am also well acquainted, there is the keenest competition for tenants on the part of land-owners, and it is commonly said that an extra able-bodied man means an extra nine acres of cultivation.³ But the country is extremely unhealthy and the climate severe; and an unresponsive soil and a very low water level involve a degree of exposure and exertion which the physique of the people is unable to sustain.

It is of course obvious that a point must sooner or later be reached at which the means of support derivable from agriculture cannot be expanded further; and if meanwhile other means of support have not been developed, density will then be determined by agricultural conditions. The contention here advanced is that that point is not yet in sight.

The above arguments are valid also for the mountainous and hilly portions of the province (Himalaya West and East Satpuras), but their application is somewhat different. Where the country is cultivable at all, there is no evidence that the limit of agricultural development has been reached, so as to interfere with a further increase of population and density. But for large tracts of the country the limit has manifestly been reached since the beginning of historical time. The Himalayan snows could never have supported an agricultural population: for these tracts of course density is determined by agricultural possibilities.

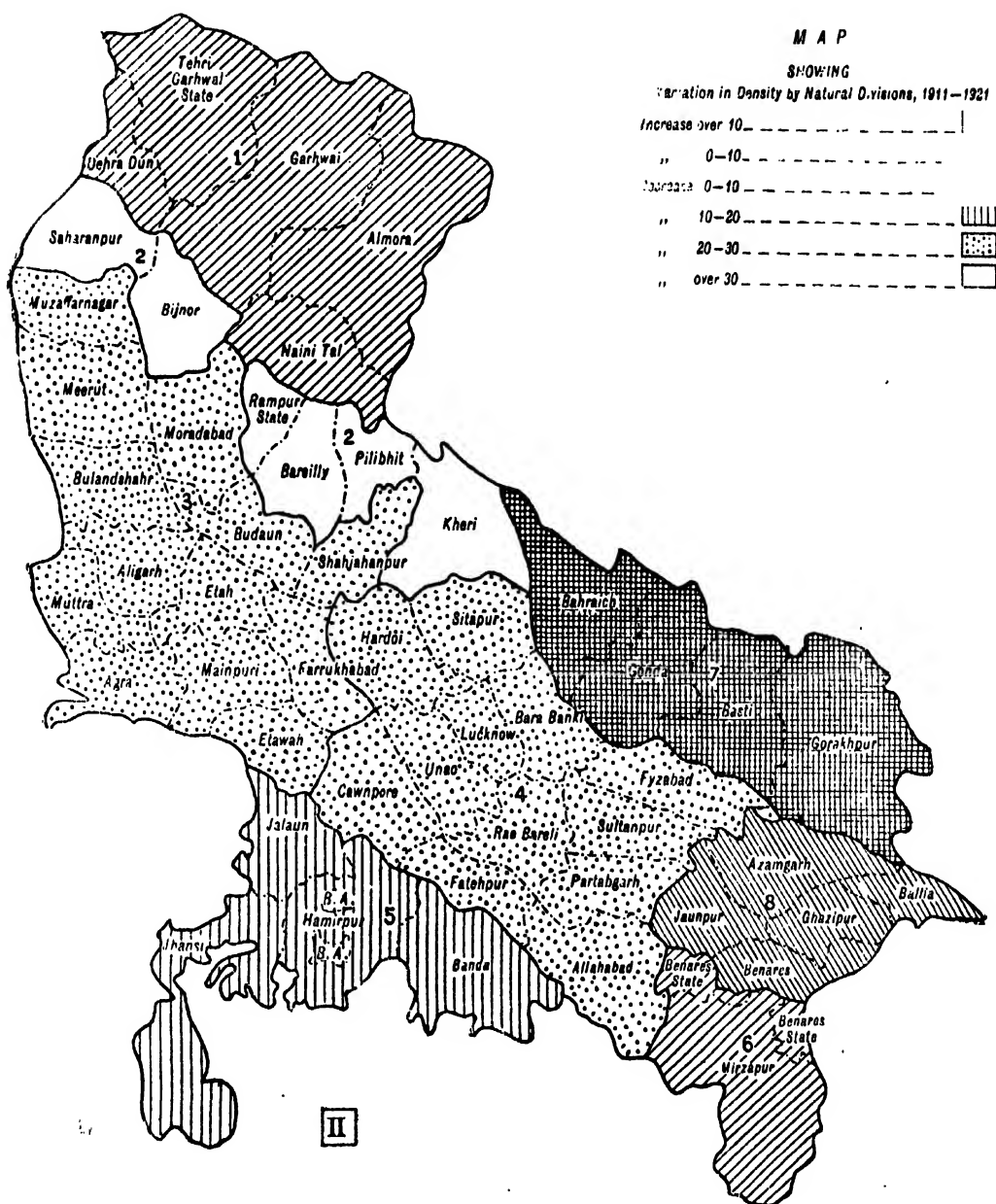
¹ The figures are those of 1919-20, and are adjusted in the same way as by Mr. Blunt. Mr. Blunt's figures are those of 1909-10. Both these years were classified by the Director of Agriculture as almost exactly normal.

² The limit may have been reached in the lands surrounding Farrukhabad city, where intensive cultivation is highly developed. The city has lost heavily in population, and this may be due to the operation of the law of diminishing returns.

³ Along the skirts of the Vindhya there are disused rock-hewn sugar presses in almost every village, though not a field of cane is to be seen. The people explain that there are not now enough men for the laborious cultivation involved.

variations by
natural
divisions: (1)
the decade.

11. Local variations since 1911 are exhibited by natural divisions in the map placed below :



As with local distribution, so with local variations since 1911: it is useless to attempt to explain these in terms of means of subsistence, that is to say, for this province, in terms of agriculture. The attempt would not be tolerated by the figures: where the soil was found to be most fully exploited in 1911, there the population is found in 1921 to have increased most. With the exception of certain unimportant tracts which cannot support a population at all, the country still provides sustenance for as many people as can survive their unhealthy environment. Nor are these local variations to be explained by migration. Men continue to emigrate from the most congested tracts—the Central and Eastern Plain, and Sub-Himalaya East—which continue to become more congested. They emigrate also from the thinly populated East Satpuras. There is no apparent correlation between congestion, variation in density, and emigration, which last is evidently due to some cause other than pressure of population on the soil. For the present decade it is only possible to say that one natural division has decreased or increased in population more than another because it has been more or less unhealthy: and it is doubtfully safe to go beyond the statement that it has done so because it was relatively more or less devastated by the influenza epidemic.

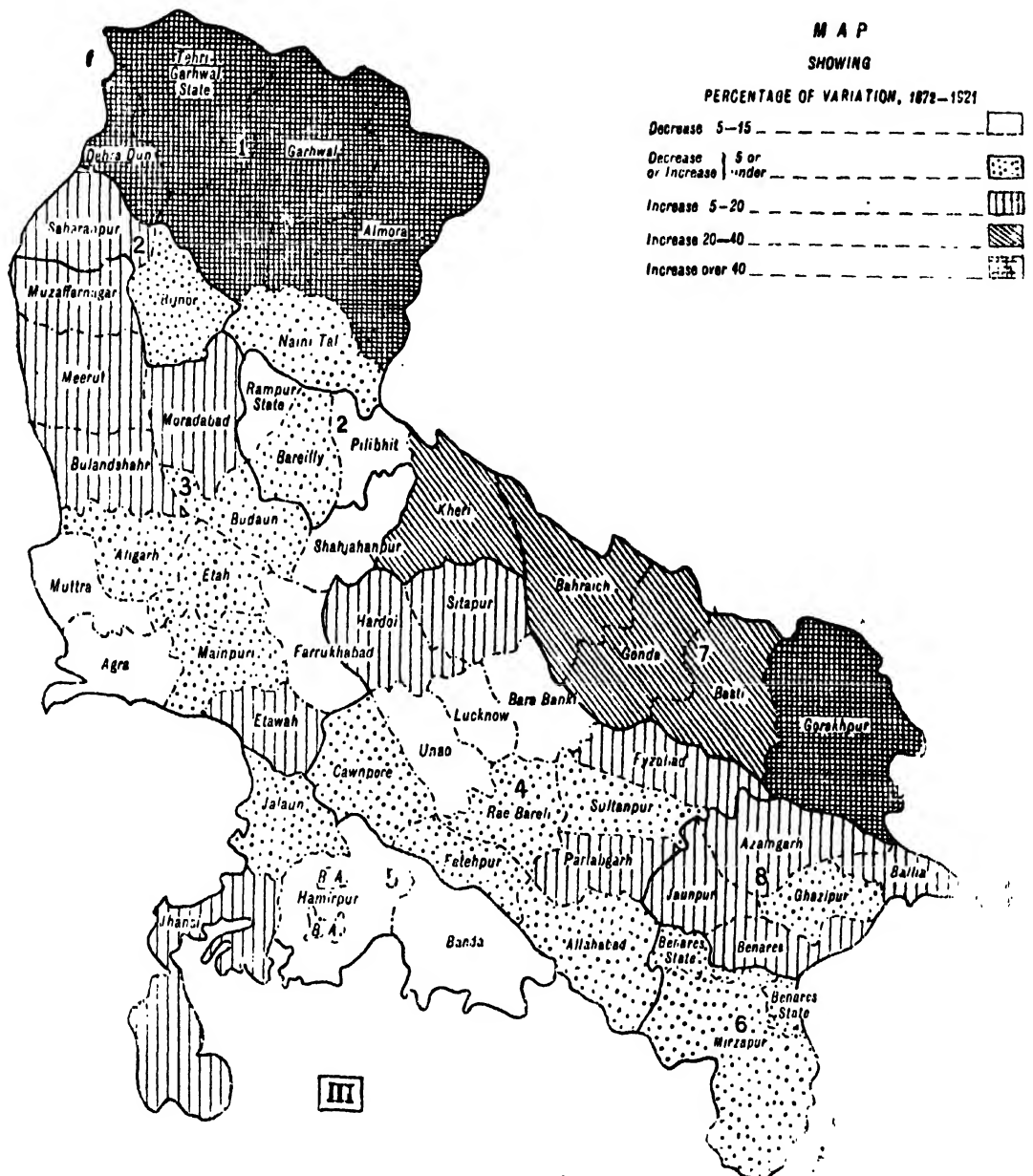
In density Sub-Himalaya West has decreased most (38), followed closely by the Western Plain (30). Next comes the Central Plain (23). Central India Plateau has decreased by 13, Himalaya West by 2. East Satpuras is practically stationary. The Eastern Plain has increased by 5, and Sub-Himalaya East by 19. The conditions of health in the divisions, as revealed by the annual vital statistics, do not throw much light on these variations so long as the year 1918 is excluded from consideration. Relatively to the province as a whole, Sub-Himalaya West had a most unhealthy year in 1917; the Western Plain had a healthy year in 1920; the Central Plain shows no variation; Himalaya West had a remarkably bad year in 1915, and the Eastern Plain a remarkably good one in 1914; Central India Plateau and East Satpuras were unaffected by the unhealthy conditions of 1911 and 1917, and Sub-Himalaya East by those of 1911 and 1920.

Natural Divisions.	Number of deaths for every 1,000 births in 1918.	sions, arranged in the order in which they have lost or gained population, the number of deaths for every 1,000 births. It will be seen that there is a marked correspondence, modified by what has been said above about conditions of health in the other years of the decade, between mortality in 1918 and variation. Sub-Himalaya West suffered less severely from influenza than the Western and the Central Plain, but relatively to these two divisions had a most unfavourable year
Sub-Himalaya, West ..	2,111	in 1917, when deaths per thousand births were 1,083, 868, and 763 respectively.
Indo-Gangetic Plain, West ..	2,543	East Satpuras had a higher mortality in 1918 than Himalaya West, but enjoyed better health in the generally unfavourable years 1911 and 1917; while Himalaya West was unique in having more deaths than births in 1915. The Central Plain suffered more from influenza than Himalaya West or East Satpuras, but was compensated by its exceptional well-being in 1914, when deaths per thousand births numbered 574, the provincial figure being 744.
Indo-Gangetic Plain, Central ..	2,110	
Central India Plateau ..	2,023	
Himalaya, West ..	1,435	
East Satpuras ..	1,621	
Indo-Gangetic Plain, East ..	1,879	
Sub-Himalaya, East ..	1,387	

I have now said enough, I think, to make my point clear. Disease dominates the variations during the decade to such an extent as to obscure wholly the operation of minor influences, to search for which would be a waste of time. I therefore leave the subject at this point. Variations in respect of units smaller than natural divisions are dealt with in an appendix.

12. Variation within so short a period as a decade may very well be determined by what in terms of history is mere accident. Variation within the last fifty years, on the other hand, should reflect permanent tendencies. This latter variation is now shown by a shaded map.

Variation by natural divisions: (2) in the last half century.



This map is disappointingly mystifying. An examination of it however makes one point clear. Increase or decrease of population has evidently not been determined by previous density. The sparsely peopled Himalayas and the congested eastern districts have alike increased enormously. The Plateau and East Satpuras have now a population generally even smaller than before. Meerut and Agra started fifty years ago with very similar densities. The former has increased and the latter has decreased.

Districts showing uniform degrees of variation are found to be in more or less compact blocks. And the map suggests perhaps that over the whole half-century famine has been the factor mainly influencing population: for in the earlier decades railway communications had not combined with experience to perfect the system of famine administration. The best protected tracts have flourished most. The Himalayas and the districts north of the Ghagra are naturally protected by a heavy and reliable rainfall: in both also irrigation is easy, in the former by gravitation and in the latter thanks to the high water level. The districts of Saharanpur, Muzaffarnagar, Meerut and Bulandshahr are artificially protected by the upper and more reliable portions of the Ganges and Jamna canals, and their population has increased. Aligarh, Etah and Mainpuri also enjoy canal protection, but Muttra and Agra, which have lost in numbers, are ill served in this respect. The relative advance in population of Sitapur and Hardoi, and of the districts of the middle east, is less easily accounted for: but

the latter districts like contiguous Bihar have a more reliable rainfall than those of the south and west.

There are several districts which in the matter of variation do not conform with their neighbours. The advantages of the hill portion of Naini Tal are neutralised by the extreme unhealthiness of its submontane portion. Pilibhit has the reputation of being the most unhealthy district in the province. The system of land tenure in Rampur State is less popular than that of the surrounding British territory. Moradabad has probably gained at the expense of Rampur, and has also several thriving industrial towns. For the nonconformity of Shahjahanpur, Farrukhabad and Etawah I can suggest no reason, though Farrukhabad, as I happen to know (having served in the district) has a falling water level. For escaping the retrogression suffered by the other districts of the Plateau—the tract most subject to famine of all the province—Jhansi is indebted to the great expansion of its capital as a garrison town and railway centre. Unao is known to have lost heavily to the mills of Cawnpore, which in turn has in the past furnished large numbers for emigration overseas. A very big proportion of the population of the Lucknow district is urban : and Lucknow city—though believed to be now in process of rebirth—is a parasite whose death has followed the dissolution of its host. I can suggest no reason for the irregular variations in Bara Banki and Ghazipur.

The foregoing suggestion—put forward with no great confidence—that over the whole of the past half-century famine may have been the predominating factor of variation, should not be misunderstood. The influence of famine has, if the views expressed in this chapter are correct, been exercised in causing mortality, either directly by starvation or indirectly by beating down resistance to disease : and perhaps in lowering fertility. It has not been exercised—or only in a small degree—in reducing the means of subsistence and thereby driving people to seek a living elsewhere. Movement of this kind is not customary among the agricultural population of the province. A man “on the land” does not leave his home to settle on the land elsewhere—at any rate where conditions of land tenure are reasonably good, as in the British districts¹. He may leave his home to seek agricultural or other employment in a better market, but almost always with the intention of returning to it. This ingrained homing instinct will be familiar to those accustomed to taking evidence. A witness is asked, “where do you live?” and then “where is your home?” and at once understands the distinction intended. The distinction would not be understood in England.

It may be also that the tracts of the province where water—which is the life of agriculture in Northern India—is least easily won, show a relatively slow rate of increase for another reason : because in these the exertion and exposure involved in cultivation are injurious to the slender physique of the people.

13. The aggregation of the population in the larger natural and administrative units having been considered, it remains only to examine its aggregation in the smallest calculable unit—that of the family. The statistics on this subject are set out in Subsidiary Table VII printed at the end of the chapter. In this table the word used is not “family” but “house.” For census purposes the two words mean the same thing. A satisfactory definition of a house is difficult to frame, but that used in 1911 could hardly be bettered, and was adopted for the present census. I reproduce it in full—

A “house,” for census purposes, is the dwelling place of a single commensal family which uses the same *chulha*, whether it be a building, or part of a building, or a temporary shelter. For the purposes of the general village register, the patwaris should be ordered to count each family which “eats from one and the same *chulha*” (*ekhi chulha ka pakka khate hain*).

NOTES.—(1) Care should be taken not to tell patwaris to count the actual *chulhas*, but the families which eat from one and the same *chulha*. In practice many commensal families, from motives of convenience or necessity, have more than one actual *chulha*, though still, theoretically, “eating from one and the same *chulha*.”

(2) Servants residing with such a commensal family should not be counted as forming separate families, even though they do not in fact eat from the same *chulha* as the commensal family in which they serve.

¹ For women of course it is the rule to go and settle elsewhere on marriage ; and through their marriage connections men are occasionally induced to change their homes. But such instances are not common enough to affect the present argument.

*Variation in
the size of the
family.*

This definition is based on an idea which is familiar to the popular mind, and is now thoroughly understood. It is clear that it describes what a European would call a commensal family or "household" rather than a "house," which to him means a structural rather than a social unit. It is well, I think, that this should be so: the structural house has comparatively little demographic interest. The nature of the commensal family of this province has been fully described before. It has of course, and must always have had, tendencies to fission. Fission may take place for personal or business reasons: if for personal reasons commensality will cease; if for business reasons commensality may nevertheless continue, in which case a family will remain undivided for census purposes. A large decrease in the size of families was found in 1911. In part at least this was due to the use of a somewhat inconsistent definition in 1901. Mr. Blunt however attributed the greater part of the decrease to the break up of the joint family system, and clearly anticipated a further decrease in the future. If the joint family system was indeed breaking up in 1911, it is clear that the process has been arrested. For the health conditions of the decade must, in themselves and without the operation of any social tendencies, have operated to reduce the size of the family. Where vast numbers of the population are carried off by epidemics, each family will furnish its quota to the general mortality: that some families should have been blotted out, while others escaped without loss, is neither what would be expected nor what has been observed. Apart from any question of the break up of the joint system, therefore, a decrease in the size of families would be looked for. It will not be found. The figure for the whole province is unchanged. It has fallen by more than one point only (leaving out of

Natural Divisions.	Number of persons per family.	
	1911.	1921.
United Provinces (British territory) ..	4.6	4.6
Himalaya, West ..	4.6	4.4
Sub Himalaya, West ..	4.4	4.1
Indo-Gangetic Plain, West ..	4.6	4.5
Indo-Gangetic Plain, Central ..	4.5	4.3
Central India Plateau ..	4.3	4.4
East Satpuras ..	4.7	4.6
Sub-Himalaya, East ..	5.1	5.2
Indo-Gangetic Plain, East ..	4.8	5.0

account the hills, where social conditions are not wholly as in the plains) in the Central Plain, which has cost very heavily in population. The relevant statistics are summarised in the margin.¹ It is evident that the fall is due to the general decrease of population, or rather to the epidemics which caused it, and that the break up of the joint family system—if it had previously begun—has now been checked.

There is a very good reason, I think, why this break up should be arrested. There can be no doubt that the arrest is due to the rise in the cost of living. Hard times are no occasion to multiply establishments where one can by any means be made to serve: for to multiply establishments is to multiply expenditure, as every Government servant in India knows.²

It may confidently be anticipated that the size of families will increase in the future, given freedom from overwhelming calamities, and unless the cost of living falls very considerably.

14. An examination of the influences that appear to have determined in the past the distribution and variation of the population has now been completed; and it is natural, though probably unprofitable, to speculate on future tendencies. A conclusion arrived at in the discussion of the age statistics has been anticipated in this chapter: namely, that the population is in its composition expansive and that a rapid increase is under normal conditions likely to be resumed after a few years. Reasons have also been given for the belief that the limit of pressure of population on means of subsistence has not yet been reached anywhere in the province. Will the people therefore go on multiplying indefinitely, and will nature continue to interfere every few years with a calamity to check the pace? This, I think, is a reasonable expectation. A belief is generally held that a rise in the standard of living

*Distribution
and
variation:
future
tendencies.*

¹ It is curious to find that the size of the family in England and Wales, 1911 (4.4) and in the U. S. A., 1910 (4.5) is almost the same as in this province. The American definition of a "family" is practically identical with our definition of a "house"—"a household or group of persons who live together, usually sharing the same table." For English census purposes a "family" is taken to be the sum of the persons for whom a "householder" is responsible, large establishments and institutions, vessels, etc., being excluded from the calculation.

² Probably others besides myself have observed a recent tendency among their private servants and public subordinates to form common messes.

operates as a natural check on increase. This may be true of other countries, but here it is to put the cart before the horse. The Hindustani peasant has, as will be agreed by all observers, a wonderful faculty for cutting his coat according to his cloth. He will give himself all the necessaries and luxuries available to him if he can afford them: if the pressure on means of subsistence increases, he will cheerfully dispense not only with luxuries but also with what others might call necessities. These characteristics are apparent in times of famine; and they are very noticeable even in children. Where an English child needs half the contents of a toyshop to amuse him, an Indian child is content to play in the mud. If toys come his way no one could appreciate them more; if he loses them again he is quite happy without them.

The population of India at the death of Akbar is roughly estimated by Mr. Moreland to have been about 100 millions, of which the share of what is now the United Provinces would not exceed 20 millions. The common people of Northern India were then undoubtedly almost naked. Blankets were unknown to them; shoes were seldom worn, and little furniture was used save a few earthen vessels.¹ The population is now 46 millions, and the people have long been more or less substantially clothed and shod; there are few who do not possess blankets, and brass pots are in almost universal use. The amusement which the peasantry gets out of attendance at the law courts and railway travelling—these two diversions are to the Indian what the picture palace is to the English proletariat—is entirely new since Akbar's day.

In recent times the standard of living has not risen in such an obvious way, but even during the last fifteen years there has been observable an increasing addition to the use of small comforts and conveniences, such as tea, cigarettes, matches, lanterns, buttons, pocket knives, looking glasses,—even gramophones; and of countless similar trifles. It seems unquestionable that up to the present time the numbers of the people and the standard of living have been rising together. And before it is assumed that the province, or any part of it, is so congested that further increase of population is impossible, it must be remembered that the same assumption was made or implied by the traveller Fitch at the end of the sixteenth, and by Sleeman at the beginning of the nineteenth century. If a stage is reached—and when all has been said it may not be far distant, for the density of some of the eastern districts is unparalleled in any rural tracts outside China—when both the population *and* the standard of living cannot be maintained, it is quite possible that the latter and not the former will contract. But perhaps by that time industry will have become a factor for general support. At present it is negligible: such industrial concerns as exist are too concentrated—in Cawnpore and a few other towns—to affect the province as a whole, for labour is immobile and shows no sign of acquiring mobility.

¹ For the above facts and the evidence on which they rest, see Moreland's "India at the Death of Akbar," pages 9 to 13 and 253 to 270. Mr. Moreland estimates the population of Northern India between Multan and Monghyr at something over 30 millions. His method of calculation for this tract (population = cultivated acres \times labour necessary to cultivate an acre) inspires more confidence than that for Southern India, for which the alleged size of armies—with a large discount for exaggeration—is the basis used. The *Seir-ul-Mutaakharin* and the works of Herodotus suggest that the alleged size of oriental armies cannot be used as evidence at all, because the unknown discount may be anything up to 95 per cent. of the known allegation. An arguable co-efficient for the Xerxes

Expeditionary Force, for instance, would be alleged thousands = actual hundreds. But ~~alleged thousands~~ ² ~~actual hundreds~~

² would be equally arguable. The numbers of a massed body can only be known by counting ocular estimates even when made by educated persons are, as is well-known, of the wildest description.

Subsidiary Table I.—*Density, water supply and crops.*

Serial number.	District and Natural Division.	Mean density per square mile in 1921 (Density of rural portion only given in brackets).	Percentage of total area of—		Percentage to cultivable area of—		Percentage of gross cultivated area which is irrigated.	Normal rainfall (in inches).	Percentage of gross cultivated area under—				
			Cultivable.	Net cultivated.	Net cultivated.	Double cropped.			Rice.	Wheat and barley.	Millet.	Gram.	Other crops.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	United Provinces (British Territory)	427	79.3	57.5	72.5	16.3	27.1	..	15.3	26.7	16.6	11.5	29.9
	<i>Himalaya, West</i>	101 (91.6)	13.5	9.1	67.2	22.8	30.9	..	17.2	32.2	10.2	1.9	38.5
1	Dehra Dun ..	178.5	19.3	10.4	53.8	22.8	30.9	84.57	17.2	32.2	10.2	1.9	38.5
2	Naini Tal ..	101.8	27.2	13.6	50.0	..	..	64.35	} Not available				
3	Almora ..	98.4	9.6	8.6	89.5	..	..	63.93					
4	Garhwal ..	86.5	9.2	7.0	76.5	..	..	57.41					
	<i>Sub-Himalaya, West</i>	407 (349)	79.5	55.5	69.8	13.5	14.5	..	17.5	30.4	12.7	7.8	31.6
5	Baharanpur ..	439.5 (361)	75.0	60.5	80.8	19.7	18.0	37.57	11.4	36.4	7.6	6.7	37.9
6	Bareilly ..	642.1 (532)	89.7	76.1	94.7	17.8	15.6	44.91	16.4	25.8	16.2	9.5	32.1
7	Bijnor ..	395.0	83.3	57.0	68.3	5.5	6.9	43.91	18.0	32.9	9.4	3.7	39.0
8	Pilibhit ..	319.7	81.0	45.7	61.0	7.2	19.9	49.09	27.2	27.5	12.5	9.9	22.9
9	Kheri ..	306.9	75.0	44.6	59.4	14.9	10.0	43.19	19.7	27.9	16.9	9.3	26.2
	<i>Indo-Gangetic Plain, West.</i>	508 (432.7)	86.0	67.3	78.3	13.8	34.5	..	3.4	31.5	20.4	9.5	35.2
10	Muzaffarnagar ..	479.3	86.5	65.5	75.8	8.9	47.2	30.10	4.6	35.6	5.2	6.4	48.2
11	Meerut ..	652.3 (545)	88.8	73.2	82.4	18.8	47.7	28.12	1.4	32.1	11.1	6.7	48.7
12	Bulandshahr ..	560.1	88.8	71.5	80.5	24.7	45.4	25.86	0.2	30.5	16.3	9.9	43.1
13	Aligarh ..	545.6 (455)	91.9	73.4	79.9	18.6	48.1	25.68	0.3	30.1	22.2	9.8	37.6
14	Muttra ..	427.0 (350)	92.8	76.5	82.5	7.2	35.7	23.42	0.0	10.7	26.0	18.8	34.5
15	Agra ..	498.2 (372)	81.4	66.6	81.5	7.4	25.2	25.00	0.0	18.3	34.2	18.5	29.0
16	Mainpuri ..	446.8	69.2	55.2	79.7	16.1	50.6	29.84	4.3	32.8	21.9	8.0	33.0
17	Etah ..	482.7	89.9	64.5	71.8	16.9	41.5	27.49	1.8	36.4	23.4	6.0	32.4
18	Budaun ..	484.3 (433)	91.4	72.6	79.4	13.5	10.1	32.80	4.2	34.6	26.2	7.8	27.2
19	Moradabad ..	524.6 (413)	92.2	72.6	78.8	8.6	7.1	38.24	8.0	38.8	17.0	4.2	32.0
20	Shahjahanpur ..	483.2 (423)	91.5	66.8	73.1	7.2	23.6	37.47	11.1	34.2	22.0	9.1	24.6
21	Farrukhabad ..	509.0 (451)	83.8	60.6	72.3	14.4	31.6	30.92	5.0	33.4	21.3	8.3	32.0
22	Etawah ..	433.8 (395)	66.3	46.7	78.0	16.3	41.3	30.82	4.9	22.8	23.8	13.2	35.3
	<i>Indo-Gangetic Plain, Central.</i>	527 (483.4)	81.0	59.7	73.7	17.9	27.9	..	16.3	26.3	17.9	13.1	26.4
23	Cawnpore ..	485.1 (392)	73.2	55.1	75.3	13.8	35.3	31.99	5.4	27.6	21.5	17.4	28.1
24	Fatehpur ..	397.3	75.7	53.8	71.1	11.9	31.3	35.06	13.8	23.6	18.7	13.1	20.8
25	Allahabad ..	491.4 (428)	80.0	56.8	71.0	14.2	20.7	37.28	18.7	22.2	20.0	20.1	19.0
26	Lucknow ..	749.1 (483)	83.0	58.7	72.7	17.5	25.6	36.11	12.0	24.4	22.3	10.8	30.5
27	Unao ..	458.4	79.5	55.1	69.3	13.6	27.2	33.62	9.9	30.4	18.8	10.1	30.8
28	Rao Baroli ..	536.6	79.3	54.4	68.6	22.8	34.4	36.54	23.5	24.4	16.9	11.7	23.5
29	Sitapur ..	484.2	90.0	70.2	78.0	17.6	13.6	37.58	16.2	18.8	24.0	8.6	22.4
30	Hardoi ..	465.0	87.2	66.4	76.2	10.0	21.1	34.63	5.6	35.8	20.5	9.6	28.5
31	Fyzabad ..	676.6 (625)	84.1	64.0	76.1	26.4	40.6	40.06	27.6	23.0	9.3	9.4	30.7
32	Sultanpur ..	583.1	90.0	57.9	74.9	24.7	35.2	41.31	28.2	24.5	9.2	11.1	27.0
33	Partabgarh ..	592.6	75.0	55.7	74.3	22.9	37.8	37.87	19.8	28.3	16.0	3.2	27.7
34	Bara Banki ..	585.5	87.2	65.0	74.6	26.9	24.2	39.00	21.9	21.8	15.1	16.5	24.7
	<i>Central India Plateau.</i>	198 (175.6)	81.0	44.1	54.5	6.3	8.6	..	2.7	15.7	28.4	32.8	20.4
35	Jhansi ..	166.9 (132)	83.5	31.8	39.8	6.9	10.2	34.30	1.8	16.0	38.5	18.9	24.8
36	Jalaun ..	261.7	80.2	63.2	78.8	6.0	12.9	31.86	0.1	20.6	22.4	16.0	20.9
37	Hamirpur ..	192.1	83.0	50.2	60.4	4.6	7.5	35.81	0.2	14.3	19.8	35.9	19.8
38	Banda ..	206.8	80.8	44.6	55.5	7.3	5.4	37.95	7.4	13.3	22.3	40.6	16.4
	<i>East Satpuras</i>	165.8 (148.6)	51.7	23.9	46.3	9.4	16.0	..	23.3	18.4	19.0	12.4	26.9
39	Mirzapur ..	165.8 (148.6)	51.7	23.9	46.3	9.4	16.0	42.15	23.3	18.4	19.0	12.4	26.9
	<i>Sub-Himalaya, East</i>	605 (584.9)	85.9	67.4	78.5	26.0	24.3	..	31.4	23.9	9.4	7.2	28.1
40	Gorakhpur ..	721.5 (690)	88.1	72.8	82.7	22.7	28.0	48.30	35.6	23.2	11.4	4.3	25.5
41	Basti ..	687.1	89.5	71.8	80.3	26.8	35.1	47.99	36.5	23.0	8.7	6.9	24.9
42	Gonda ..	624.4	84.9	64.3	75.8	31.3	20.2	45.26	26.4	23.6	7.7	9.8	32.5
43	Bahraich ..	402.8	78.8	56.7	72.0	25.1	7.1	43.62	22.5	26.6	8.5	10.2	32.2
	<i>Indo-Gangetic Plain, East.</i>	711 (650.3)	84.4	66.0	78.2	20.9	37.1	..	22.6	25.2	10.6	8.8	32.2
44	Banarès ..	898.6 (704)	90.0	74.3	82.6	22.4	31.1	39.00	22.8	22.6	10.3	11.3	33.0
45	Jaunpur ..	745.2 (711)	84.2	64.1	76.0	21.1	45.5	41.08	18.4	19.7	9.7	5.1	37.1
46	Ghazipur ..	597.9	86.8	67.7	78.0	18.4	29.2	39.46	21.0	22.9	13.3	12.6	30.2
47	Kullia ..	679.5	84.8	66.6	78.8	23.8	28.3	41.18	17.0	22.8	13.0	14.9	32.3
48	Azamgarh ..	690.8	80.5	62.3	77.3	20.1	45.0	41.12	30.3	26.8	7.7	8.9	31.3

1. The figures are based on the report of the Director of Land Records on the agricultural year 1919-20, which was an approximately normal year and almost identical in cropped area with 1909-1910, taken as the basis of this table in the 1911 Report.

2. Density of rural portion has been obtained by deducting one square mile for each 15,000 of urban population (Actual of 1911 for 24 cities is one square mile for 16,500 population).

Subsidiary Table II.—*Distribution of the population classified according to density.*

Serial number.		Natural Division.		Tahsils with a population per square mile of																Total	
				Under 150.		150 to 300.		300 to 450.		450 to 600.		600 to 750.		750 to 900.		900 to 1,050.		1,050 and over			
		Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.	Area.	Popula- tion.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
1	United Provin- ces (British Territory)	17,292	1,573,088	14,542	3,103,112	20,994	8,124,355	30,938	15,868,518	15,654	10,410,230	4,427	3,635,342	1,290	1,296,668	1,151	1,364,474	106,288	45,375,787		
	Himalaya, West..	16 3	3 5	13 7	6 8	19 8	17 9	29 0	35 0	14 7	22 9	4 2	8 0	1 2	2 9	1 1	3 0	100	100		
		12,726	1,106,159	2,185	398,483	..	..	..	..	..	..	..	..	..	..	..	..	14,911	1,504 42
		85 4	73 7	14 6	26 3	..	..	..	..	..	..	..	..	..	..	..	..	14 0	3 3
2	Sub-Himalaya, West.	..	..	22 7	506,897	4,664	1,588,822	2,647	1,333,804	456	280,986	..	..	310	314,093	..	..	9,914	4,036,604
		..	..	22 6	12 6	43 0	39 4	26 7	33 0	4 6	7 2	..	..	3 1	7 8	..	..	9 3	8 9
3	Indo-Gangetic Plain, West.	..	..	..	..	8,548	3,350,873	10,944	5,567,029	3,658	2,373,415	313	247,876	272	590,063	269	277,707	23,894	12,145,963
		..	..	..	..	35 8	27 9	45 7	45 9	15 2	19 5	1 3	2 0	1 1	2 4	0 9	2 3	22 5	26 8
4	Indo-Gangetic Plain, Central.	..	..	921	216,645	5,177	2,083,076	11,441	5,889,549	3,650	2,340,332	859	274,239	708	692,510	360	414,482	22,596	11,920,193
		..	..	4 1	1 8	22 9	17 5	50 7	49 5	16 0	19 5	1 6	2 3	3 1	5 8	1 6	3 6	21 3	26 3
5	Central India Plateau.	1,945	232,382	8,014	1,671,507	481	161,408	..	..	..	..	..	..	..	..	..	..	10,440	2,065,297
		18 6	11 2	76 8	81 0	4 6	7 8	..	..	..	..	..	..	..	..	..	..	9 8	4 4
6	East Satpuras ..	2,621	334,547	1,155	307,180	562	182,455	..	..	..	..	..	..	..	..	..	..	4,368	724,183
		60 0	32 4	27 2	42 4	12 8	25 2	..	..	..	..	..	..	..	..	..	..	4 1	1 6
	Sub-Himalaya, East.	..	..	..	..	1,962	718,760	4,698	2,374,159	3,407	2,218,310	2,917	2,419,304	..	..	..	..	12,784	7,730,533
		..	..	..	..	15 5	9 3	36 8	30 8	25 1	28 7	22 8	31 2	..	..	..	..	12 0	17 1
	Indo-Gangetic Plain, East.	..	..	..	..	..	..	1,228	708,977	4,733	3,188,187	838	693,923	..	..	582	662,585	7,391	5,248,372
		..	..	..	..	..	..	16 6	13 4	64 2	60 8	11 3	13 2	..	..	7 9	12 6	7 0	11 6

Subsidiary Table III—*Variation in relation to density since 1872.*

District and Natural Division.	Percentage of variation (increase+, decrease—)					Percentage of net variation 1872 to 1921.	Mean density per square mile.						Increase + Decrease— 1911 to 1921.
	1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.		1921.	1911.	1901.	1891.	1881.	1872.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
United Provinces ..	-3.1	-1.0	+1.7	+6.3	+5.3	+9.1	514	440	445	437	412	390	-28
<i>Himalaya, West ..</i>	<i>-1.9</i>	<i>+10.4</i>	<i>+2.6</i>	<i>+13.4</i>	<i>+13.8</i>	<i>+43.9</i>	<i>101</i>	<i>103</i>	<i>93</i>	<i>90</i>	<i>80</i>	<i>70</i>	<i>-2</i>
1. Dehra Dun ..	+3.6	+15.3	+6.0	+16.7	+23.2	+81.7	179	172	149	141	121	98	+6
2. Naini Tal ..	-14.4	-2	-12.0	+5.3	+27.7	+1.1	102	119	119	185	128	101	-17
3. Almora ..	+0.9	+15.9	+11.8	+15.5	+1.8	+53.8	98	97	84	76	65	64	+1
4. Garhwal ..	+1.2	+11.7	+5.4	+17.9	+11.4	+51.4	87	86	76	72	61	55	+2
<i>Sub-Himalaya, West ..</i>	<i>-6.9</i>	<i>+1.0</i>	<i>+1.5</i>	<i>+5.2</i>	<i>+3.9</i>	<i>+4.4</i>	<i>407</i>	<i>437</i>	<i>432</i>	<i>426</i>	<i>405</i>	<i>390</i>	<i>-30</i>
5. Saharanpur ..	-5.0	-5.6	+4.4	+2.2	+10.8	+6.1	440	462	490	469	458	414	-22
6. Bareilly ..	-7.4	+4	+4.7	+1.0	+1.5	-0.1	642	693	690	659	653	642	-51
7. Bijnor ..	-8.2	+3.3	-1.8	+10.6	-2.1	+0.4	395	429	416	423	385	392	-34
8. Pilibhit ..	-11.5	+3.7	-3.0	+7.4	-8.2	-12.3	320	361	348	359	394	364	-41
9. Kheri ..	-4.8	+6.0	+2	+8.6	+12.7	+28.8	307	322	304	304	279	248	-15
<i>Indo-Gangetic Plain, West ..</i>	<i>-5.8</i>	<i>-2.0</i>	<i>+10.0</i>	<i>+1.5</i>	<i>-2.1</i>	<i>+1.0</i>	<i>508</i>	<i>538</i>	<i>553</i>	<i>499</i>	<i>491</i>	<i>502</i>	<i>-30</i>
10. Muzaffarnagar ..	-1.6	-7.8	+18.5	+1.9	+9.9	+15.2	479	483	524	462	453	412	-4
11. Meerut ..	-0.8	-1.4	+10.7	+6.0	+2.9	+17.5	658	648	657	593	560	544	+5
12. Bulandshahr ..	-5.0	-1.3	+19.8	+2.7	-1.4	+18.8	562	590	597	498	485	492	-28
13. Aligarh ..	-8.9	-2.9	+15.1	+2.2	-4.9	-1.1	546	599	617	536	525	561	-53
14. Muttra ..	-8.7	-14.0	+7.0	+6.2	-14.1	-20.9	427	452	526	492	463	540	-25
15. Agra ..	-9.6	-3.6	+5.7	+3.0	-9.4	-14.1	498	551	572	541	595	580	-58
16. Mainpuri ..	-6.2	-3.8	+8.9	-4.9	+4.6	-2.8	447	476	495	455	478	457	-29
17. Etah ..	-4.8	+9	+43.1	-7.2	-8.7	±0	483	504	500	406	488	480	-21
18. Budaun ..	-7.5	+2.7	+10.8	+2.1	-3.0	+4.7	484	524	510	460	461	465	-40
19. Moradabad ..	-5.1	+6.0	+1.1	+2.1	+2.9	+6.9	525	558	522	516	515	491	-29
20. Shahjahanpur ..	-11.3	-2.6	+3	+7.2	-9.9	-11.8	486	548	534	532	496	551	-62
21. Farrukhabad ..	-4.8	+2.8	+7.8	-5.4	-1.0	-6.6	509	535	550	510	539	545	-26
22. Etawah ..	-3.5	-5.8	+10.9	+7	+8.0	+9.8	434	449	477	430	427	395	-15
<i>Indo-Gangetic Plain, Central.</i>	<i>-4.1</i>	<i>-3.7</i>	<i>+1.3</i>	<i>+8.5</i>	<i>-0.7</i>	<i>+1.4</i>	<i>527</i>	<i>550</i>	<i>571</i>	<i>564</i>	<i>519</i>	<i>520</i>	<i>-23</i>
23. Cawnpore ..	+0.6	-9.3	+4.1	+2.4	+2.2	-0.6	485	482	531	510	498	483	+2
24. Fatehpur ..	-3.6	-1.4	-1.9	+2.3	+3.0	1.7	397	412	418	426	416	403	-15
25. Allahabad ..	-4.3	1.6	3.8	+5.1	+5.6	+0.6	491	510	521	542	516	490	-19
26. Lucknow ..	-5.2	-3.6	+2.6	+11.1	-10.4	-6.9	749	790	820	801	721	805	-41
27. Jnao ..	-10.1	-0.7	+2.4	+6.1	-5.0	-12.7	458	510	546	534	503	529	-52
28. Rae Bareli ..	-7.9	-1.6	-3	+8.9	-3.8	-5.3	537	583	592	594	545	567	-46
29. Sitapur ..	-4.3	-8.1	+9.3	+12.4	+2.7	+15.7	484	506	522	478	426	415	-22
30. Hardoi ..	-3.3	+2.6	-1.8	+12.7	+6.0	+15.3	465	481	469	477	424	399	-16
31. Fyzabad ..	+1.5	-5.8	+7	+12.5	+5.5	+14.3	677	666	707	702	624	591	+11
32. Sultanpur ..	-4.3	-3.3	+7	+12.3	-7.9	-3.5	586	612	632	618	559	607	-26
33. Partabgarh ..	-5.0	-1.4	+2	+7.5	+8.2	+9.3	593	614	633	631	587	542	-31
34. Bara Banki ..	-5.0	-8.1	+4.3	+10.1	-7.8	-7.5	586	616	670	643	584	633	-30
<i>Central India Plateau ..</i>	<i>-6.5</i>	<i>+4.8</i>	<i>-8.4</i>	<i>+2.2</i>	<i>+4.0</i>	<i>-4.5</i>	<i>198</i>	<i>211</i>	<i>202</i>	<i>220</i>	<i>215</i>	<i>207</i>	<i>-13</i>
35. Jhansi ..	-10.9	+10.4	-9.8	+9.4	+17.8	+14.3	167	187	170	188	172	146	-20
36. Jalaun ..	+0.2	+1.3	+8	-5.2	+3.4	+0.2	162	261	258	256	270	261	+1
37. Hamirpur ..	-5.4	+1.5	-10.7	+1.3	-4.1	-16.8	192	208	200	224	221	231	-11
38. Banda ..	-6.7	+4.1	-10.6	+1.0	+1	-12.1	207	222	213	237	286	235	-15
<i>East Satpuras ..</i>	<i>-0.1</i>	<i>-1.1</i>	<i>-6.8</i>	<i>+2.2</i>	<i>+11.9</i>	<i>+2.4</i>	<i>166</i>	<i>205</i>	<i>207</i>	<i>252</i>	<i>217</i>	<i>194</i>	<i>±0†</i>
39. Mirzapur ..	-0.1	-1.1	-6.8	+2.2	+11.9	+2.4	166	205	207	252	217	194	±0†
<i>Sub-Himalaya, East ..</i>	<i>+3.2</i>	<i>+3.5</i>	<i>+2</i>	<i>+13.2</i>	<i>+17.6</i>	<i>+42.6</i>	<i>605</i>	<i>586</i>	<i>566</i>	<i>565</i>	<i>499</i>	<i>424</i>	<i>+19</i>
40. Gorakhpur ..	+2.1	+8.9	-1.2	+14.4	+29.6	+63.2	722	707	649	657	574	443	+15
41. Basti ..	+5.2	-9	+3.4	+9.5	+10.7	+30.7	687	653	659	637	582	515	+34
42. Gonda ..	+4.3	+6	-3.8	+14.8	+8.8	+25.7	524	503	500	519	452	416	+21
43. Bahraich ..	+1.7	-3	+5.1	+13.9	+13.2	+37.3	403	396	397	378	332	295	+7
<i>Indo-Gangetic Plain, East</i>	<i>+0.3</i>	<i>-5.5</i>	<i>-7.0</i>	<i>+5.1</i>	<i>+20.2</i>	<i>+11.7</i>	<i>711</i>	<i>706</i>	<i>747</i>	<i>804</i>	<i>764</i>	<i>636</i>	<i>+5</i>
44. Benares ..	+1.8	+1.7	-4.3	+3.3	+12.4	+15.0	899	890	875	914	885	788	+9
45. Jaunpur ..	-0.1	-3.9	-4.9	+4.5	+17.9	+12.6	745	746	776	816	780	662	-1
46. Ghazipur ..	-0.9	-8.1	-10.8	+6.4	+15.7	±0	598	603	657	736	692	598	-5
47. Ballia ..	-1.7	-14.4	-8	+2.0	+34.2	+14.4	680	680	794	800	784	584	-0
48. Amangarh ..	+2.4	-3.6	-11.4	+7.7	+21.8	+14.8	691	675	700	790	733	602	+16
<i>States</i>													
49. Tehri-Garhwal (Himalaya, West.)	+5.8	+11.9	+11.5	+20.7	+51.7	+141.7	76	72	64	58	48	31	+4
50. Rampur (Sub-Himalaya, West.)	-14.6	-4	-3.3	+1.7	+6.9	-10.5	505	588	593	613	603	569	-83
51. Benares (East Satpuras) ..	+1.4	..	..	..	..	..	417	..	..	..	..	..	..

† No variation after adjustment consequent on creation of Benares State.

Subsidiary Table IV.—Variation in natural population.

District and natural division.	Population in 1921.				Population in 1911.				Variation per cent. (1911 to 1921) in natural population (Increase (+) Decrease (-))
	Actual population	Immigrants.	Emigrants.	Natural population.	Actual population.	Immigrants.	Emigrants.	Natural population.	
1	2	3	4	5	6	7	8	9	10
United Provinces (British Territory.)	45,375,781	522,599	1,465,873	46,319,061	46,807,490	721,878	1,438,767	47,524,379	-2.5
<i>Himalaya, West</i>	1,504,642	129,111	39,686	1,414,917	1,533,678	151,193	44,447	1,426,932	-8
1. Dehra Dun ..	212,243	60,271	6,392	156,364	104,888	54,644	8,867	150,111	-5
2. Naini Tal ..	276,875	107,896	15,003	184,982	323,519	134,557	22,863	211,825	-13.1
3. Almora ..	530,338	9,660	53,783	574,461	525,630	11,609	53,822	564,843	+1.7
4. Garhwal ..	485,186	11,684	25,605	499,167	479,641	13,789	24,842	490,694	+1.7
<i>Sub-Himalaya, West</i>	4,036,604	219,472	245,368	4,062,500	4,333,827	321,913	312,660	4,324,574	-6.1
5. Saharanpur ..	937,471	52,864	59,980	944,587	986,439	74,416	66,078	978,101	-3.4
6. Bareilly ..	1,013,875	80,310	10,056	1,033,621	1,094,663	107,832	130,245	1,117,076	-7.5
7. Bijnor ..	740,182	23,307	51,864	711,739	805,960	34,301	68,913	840,512	-8.5
8. Pilibhit ..	481,601	49,800	42,551	424,352	487,617	62,728	53,324	484,213	-12.4
9. Khuri ..	913,475	64,653	42,379	891,201	959,208	111,378	56,828	904,658	-1.5
<i>Indo-Gangetic Plain, West.</i>	12,145,963	390,257	534,674	12,290,380	12,870,498	538,167	585,355	12,917,686	-5.0
10. Muzaffarnagar ..	794,295	73,669	6,490	787,286	807,543	95,517	67,639	779,655	+1.0
11. Meerut ..	1,439,074	126,957	120,459	1,492,576	1,504,186	150,227	124,646	1,478,605	+9
12. Bulandshahr ..	1,066,519	92,068	106,172	1,080,623	1,123,132	114,317	113,535	1,122,350	-3.7
13. Aligarh ..	1,061,745	102,827	134,402	1,093,320	1,165,680	139,478	160,958	1,177,160	-7.1
14. Muttra ..	619,138	76,909	91,279	633,868	656,310	113,238	112,425	655,497	-3.3
15. Agra ..	924,155	102,658	140,892	962,390	1,021,847	139,717	172,715	1,054,845	-8.8
16. Mainpuri ..	748,027	67,873	73,154	753,308	797,624	110,389	96,325	783,660	-3.9
17. Etah ..	829,790	92,219	86,852	824,393	871,872	126,851	104,837	849,358	-2.9
18. Budaula ..	975,347	78,605	99,720	990,462	1,053,963	98,089	116,499	1,072,363	-7.1
19. Moradabad ..	1,198,153	70,747	107,917	1,235,823	1,262,933	85,381	138,604	1,310,156	-6.1
20. Shahjahanpur ..	839,115	73,582	98,934	864,467	945,775	98,339	134,472	981,908	-12.0
21. Farrukhabad ..	850,633	90,840	84,103	848,896	900,022	108,169	110,015	901,868	-5.9
22. Etawah ..	733,532	70,392	53,988	717,128	780,121	95,726	79,966	744,361	-3.7
<i>Indo-Gangetic Plain, Central.</i>	11,920,193	319,089	555,833	12,156,937	12,425,268	414,453	666,701	12,677,516	-4.0
23. Cawnpore ..	1,148,664	141,558	101,296	1,108,402	1,112,283	153,441	125,975	1,114,820	-1.6
24. Fatehpur ..	662,392	47,605	46,412	661,229	676,939	46,644	62,212	693,507	-6.1
25. Allahabad ..	1,404,445	60,021	117,716	1,462,141	1,467,136	96,985	135,203	1,505,354	-2.9
26. Lucknow ..	724,344	102,924	77,937	699,357	764,411	140,650	97,535	721,290	-3.0
27. Unao ..	819,128	37,818	75,748	857,038	910,915	65,827	95,471	950,559	-5.9
28. Rae Bareilly ..	936,403	46,993	79,591	969,001	1,016,864	65,861	97,026	1,018,029	-7.8
29. Sitapur ..	1,089,481	62,158	68,244	1,095,567	1,188,996	85,144	101,091	1,154,943	-5.1
30. Hardoi ..	1,084,410	54,798	88,349	1,117,961	1,121,248	73,044	110,815	1,159,019	-3.5
31. Fyzabad ..	1,171,930	61,289	102,638	1,213,279	1,154,109	91,997	139,254	1,201,360	+1.0
32. Sultanpur ..	1,003,912	60,242	95,593	1,039,263	1,048,524	82,841	112,563	1,078,246	-2.6
33. Partabgarh ..	855,180	54,949	84,052	884,233	899,973	66,918	102,799	935,854	-5.5
34. Bara Banki ..	1,029,954	48,180	73,692	1,055,466	1,083,867	61,373	95,792	1,118,286	-5.6
<i>Central India Plateau</i>	2,065,297	137,688	208,770	2,136,379	2,207,923	199,845	202,005	2,210,083	-3.3
35. Jhansi ..	606,499	68,375	106,023	644,147	680,688	108,653	72,414	644,449	+1.0
36. Jalaun ..	405,439	41,047	29,881	391,273	404,775	51,863	40,050	392,962	+3
37. Hamirpur ..	440,245	40,001	71,090	465,334	465,223	53,260	71,608	483,571	-3.8
38. Banda ..	613,114	41,195	60,706	632,625	657,237	42,927	74,394	688,704	-8.1
<i>East Satpuras</i>	724,183	42,225	79,512	761,470	724,801	41,962	68,196	751,035	+1.4
39. Mirzapur ..	724,183	42,225	79,512	761,470	724,801	41,962	68,196	751,035	+1.4
<i>Sub-Himalaya, East</i>	7,730,533	121,419	178,483	7,787,597	7,491,490	189,374	185,498	7,487,601	+4.0
40. Gorakhpur ..	3,266,830	89,233	131,169	3,308,763	3,201,180	151,552	136,324	3,185,952	+3.9
41. Basti ..	1,925,228	63,757	99,740	1,961,211	1,830,421	85,546	137,279	1,882,154	+4.2
42. Gonda ..	1,473,098	72,063	75,733	1,476,768	1,412,212	93,481	95,280	1,414,011	+4.4
43. Bahraich ..	1,065,377	50,021	25,499	1,040,895	1,047,677	77,178	33,890	1,004,389	+3.6
<i>Indo-Gangetic Plain, East.</i>	5,248,372	113,465	484,256	5,619,163	5,220,005	148,638	584,545	5,655,912	-7
44. Benares ..	901,312	63,135	119,260	957,440	885,442	99,441	106,958	892,957	+7.2
45. Jaunpur ..	1,165,105	59,579	139,229	1,234,755	1,150,254	74,039	159,137	1,244,352	-5
46. Ghazipur ..	832,289	49,177	117,614	900,726	839,725	40,450	148,432	947,697	-5.0
47. Ballia ..	831,009	33,350	106,835	901,494	845,766	31,649	135,818	949,935	-4.7
43. Azamgarh ..	1,528,657	58,548	151,639	1,621,748	1,494,818	68,870	200,019	1,623,967	-1
<i>Unspecified</i>	..	..	81,279	..	..	..	..	..	..

Subsidiary Table V—Comparison with vital statistics.

Serial number.	District and natural division.	In 1911-1920 total number of—		Number per cent of population of 1911 of—		Excess (+) or deficiency (—) of births over deaths.	Increase (+) or Decrease (—) of population of 1921 compared with adjusted population of 1911.	
		Births.	Deaths.	Births.	Deaths.		Natural population.	Actual population.
1	2	3	4	5	6	7	8	9
	United Provinces (British Territory).	18,776,514	18,819,255	42·3	40·2	+957,259	—1,206,036	—1,431,703
	<i>Himalaya, West.</i>	<i>544,766</i>	<i>524,593</i>	<i>35·5</i>	<i>34·2</i>	<i>+20,173</i>	<i>—12,015</i>	<i>—29,036</i>
1	Dehra Dun	51,136	56,551	24·9	27·1	—5,415	—747	+7,355
2	Naini Tal	90,744	136,905	28·0	42·3	—46,162	—27,843	—46,644
3	Almora	210,289	167,255	40·1	31·9	+43,034	+9,611	+4,708
4	Garhwal	197,597	163,881	40·2	34·1	+28,716	+8,413	+5,545
	<i>Sub-Himalaya, West.</i>	<i>1,915,339</i>	<i>1,966,909</i>	<i>44·2</i>	<i>45·4</i>	<i>—51,570</i>	<i>—262,074</i>	<i>—297,223</i>
5	Saharanpur	421,127	413,894	42·7	42·0	+7,233	—33,514	—48,968
6	Bareilly	486,784	511,755	44·5	46·7	—24,971	—83,455	—80,788
7	Rijnor	391,645	401,881	48·5	49·8	—10,336	—71,773	—65,718
8	Pilibhit	215,662	243,880	44·3	50·0	—28,218	—59,861	—56,016
9	Kheri	400,221	395,499	41·8	41·8	+4,722	—13,457	—45,733
	<i>Indo-Gangetic Plain, West.</i>	<i>5,606,741</i>	<i>5,456,875</i>	<i>43·5</i>	<i>42·3</i>	<i>+149,866</i>	<i>—627,306</i>	<i>—724,535</i>
10	Muzaffarnagar	326,045	298,002	40·3	36·9	+28,043	+7,631	—13,278
11	Meerut	657,173	597,874	43·2	39·3	+59,299	+13,971	—5,112
12	Bulandshahr	505,345	474,287	45·0	42·2	+31,058	—41,727	56,613
13	Aligarh	487,079	475,676	41·9	40·8	+12,303	—83,840	103,935
14	Muttra	260,388	257,892	39·7	39·3	+2,496	—21,689	—37,172
15	Agra	445,386	482,859	43·6	47·2	—37,473	—47,455	—97,692
16	Mainpuri	306,890	282,773	37·7	35·5	+24,117	—30,252	—49,597
17	Etah	369,070	334,161	42·3	38·3	+34,909	—24,965	—41,612
18	Budaun	456,723	445,376	43·3	42·2	+11,347	—75,901	—78,606
19	Moradabad	592,007	582,346	46·9	46·2	+9,661	—80,333	64,280
20	Shahjahanpur	441,344	471,115	46·6	49·8	—29,771	—117,441	—106,680
21	Farrukhabad	423,744	435,034	47·0	48·3	—11,290	—52,972	—43,389
22	Etawah	334,647	319,480	44·0	42·1	+15,167	—27,233	—26,589
	<i>Indo-Gangetic Plain, Central.</i>	<i>5,253,531</i>	<i>5,141,650</i>	<i>42·3</i>	<i>41·4</i>	<i>+111,881</i>	<i>—520,579</i>	<i>—506,075</i>
23	Cawnpore	488,079	496,390	42·7	43·4	—8,311	—6,418	+6,878
24	Fatehpur	293,138	218,084	43·8	39·6	+75,054	—42,278	—24,547
25	Allahabad	592,654	558,951	40·4	38·1	+33,703	—43,213	—62,691
26	Lucknow	315,643	327,850	41·3	42·9	—12,207	—21,939	—40,067
27	Unao	377,489	399,663	41·5	43·9	—22,224	—93,521	—91,787
28	Rae Bareilly	404,133	407,322	39·7	40·0	—3,189	—79,028	—80,461
29	Sitapur	498,789	479,164	43·8	42·1	+19,625	—59,376	—49,515
30	Hardoi	512,654	475,742	45·6	42·4	+36,912	—40,958	—36,888
31	Fyzabad	488,411	425,171	42·3	36·8	+63,240	+11,913	+17,821
32	Sultanpur	451,886	462,439	43·1	44·1	—10,553	—38,983	—44,612
33	Partabgarh	365,389	357,476	40·6	39·7	+7,913	—91,621	—44,843
34	Bara Banki	465,816	472,917	43·0	43·6	—7,101	—62,820	—53,913
	<i>Central India Plateau.</i>	<i>994,068</i>	<i>923,200</i>	<i>45·0</i>	<i>41·6</i>	<i>+70,868</i>	<i>—73,704</i>	<i>—142,626</i>
35	Jhansi	334,674	310,663	49·2	45·6	+24,011	—302	74,189
36	Jalaun	185,382	165,365	45·8	40·8	+20,017	+1,311	+664
37	Hamirpur	229,470	216,968	49·4	46·6	+12,502	—18,237	—24,978
38	Banda	244,542	230,204	37·2	35·0	+14,338	—56,079	—44,123
	<i>East Satpuras.</i>	<i>307,546</i>	<i>260,757</i>	<i>42·4</i>	<i>36·0</i>	<i>+46,789</i>	<i>+10,435</i>	<i>—618</i>
39	Mirzapur	307,540	260,757	42·4	36·0	+46,789	+10,435	—618
	<i>Sub-Himalaya, East.</i>	<i>3,024,367</i>	<i>2,466,366</i>	<i>40·4</i>	<i>32·9</i>	<i>+558,001</i>	<i>+299,993</i>	<i>+239,049</i>
40	Gorakhpur	1,220,130	967,567	38·1	30·2	+252,563	+122,811	+65,650
41	Basti	784,071	633,032	42·3	34·6	+151,039	+79,057	+94,807
42	Gonda	559,907	460,658	39·7	32·6	+99,249	+62,757	+60,886
43	Bahraich	480,259	405,109	43·8	38·6	+75,150	+36,466	+17,700
	<i>Indo-Gangetic Plain, East.</i>	<i>2,130,156</i>	<i>2,089,186</i>	<i>40·7</i>	<i>39·9</i>	<i>+40,970</i>	<i>—36,749</i>	<i>+28,367</i>
44	Benares	390,929	365,993	43·6	40·8	+24,936	+64,483	+15,870
45	Jaunpur	448,889	450,799	38·8	39·0	—1,910	—6,597	—1,143
46	Ghazipur	323,479	326,567	38·6	38·9	—3,088	—46,971	—7,436
47	Ballia	312,545	330,367	37·0	39·0	—17,822	—45,441	—14,757
48	Azamgarh	654,314	615,520	43·8	41·2	+38,794	—2,219	+35,839

Subsidiary Table VI.—*Variation by tahsils classified according to density (a) actual variation.*

Natural Division.	Period.	(a) Variation in tahsils with a population per square mile at commencement of decade of—							
		Under 150.	150 to 300.	300 to 450.	450 to 600.	600 to 750.	750 to 900.	900 to 1,050.	Over 1,050.
1	2	3	4	5	6	7	8	9	10
United Provinces (British Territory.)	1911—1921	—114,077	+279,927	+367,726	837,853	—1,042,862	197,885	+643,589	559,179
	1901—1911	—52,505	—77,255	+1,440,625	+11,773	—1,448,128	+695,910	—697,743	—382,910
	1891—1901	+106,784	+73,639	—2,170,293	+2,214,361	+1,607,243	—1,461,325	+78,622	+337,734
	1881—1891	+1,013,611	—659,429	—256,015	—1,159,511	+2,794,796	+1,221,776	+121,667	+724,981
	1881—1921	+953,813	—383,118	—617,959	+228,710	+1,911,049	+258,476	+146,135	+120,626
Himalaya, West..	1911—1921	—215,959	+248,220	—61,181	..	..	..	..	..
	1901—1911	+119,819	—32,202	+61,184	..	..	..	..	..
	1891—1901	+180,799	—72,127	—73,168	..	..	..	..	..
	1881—1891	+877,833	..	..	..	..	..	..	..
	1881—1921	+962,292	..	..	..	..	..	..	..
Sub-Himalaya, West.	1911—1921	..	+126,230	—283,549	+91,284	—227,492	..	—4,518	..
	1901—1911	..	+12,860	+261,269	—426,597	+202,441	..	+318,613	—325,650
	1891—1901	—95,205	+70,831	—43,207	+62,417	+23,784	..	—298,482	+325,650
	1881—1891	+95,205	—211,398	+167,851	+371,028	—225,812	..	+12,751	..
	1881—1921	..	+18,523	+102,364	+118,130	—227,076	..	+28,361	..
Indo-Gangetic Plain, West.	1911—1921	..	—161,809	+717,750	—712,757	—690,260	—5,027	—44,403	—6,503
	1901—1911	..	—161,020	+1,385,191	—1,089,570	+107,914	—485,653	—7,677	+11,492
	1891—1901	..	+7,340	—2,018,962	+1,626,266	+1,049,160	+172,106	+342,143	+18,326
	1881—1891	..	—8,129	+238,389	—312,353	+234,078	+20,552	..	+5,953
	1881—1921	..	..	+322,368	—488,414	+700,902	—298,022	+290,063	+10,942
Indo-Gangetic Plain, Central.	1911—1921	..	—10,703	+818,947	—768,946	—581,678	—4,520	+692,510	—650,685
	1901—1911	..	+3,192	+50,309	+500,533	—925,181	+278,759	—334,327	—57,161
	1891—1901	..	—36,755	+330,614	+287,074	—452,725	—316,586	+334,227	+16,694
	1881—1891	..	—98,277	—1,414,978	—677,858	+3,072,716	+25,144	—607,493	+701,074
	1881—1921	..	—142,543	—215,108	—659,197	+1,113,132	—17,203	+85,017	+9,912
Central India Plateau.	1911—1921	+110,008	—84,912	—167,722	..	..	..	..	..
	1901—1911	—193,068	+126,167	+168,749	..	..	..	..	..
	1891—1901	+41,252	—247,990	+13,291	..	..	..	..	..
	1881—1891	+25,112	+40,206	—14,826	..	..	..	..	..
	1881—1921	—16,706	—166,529	—508	..	..	..	..	..
East Satpuras ..	1911—1921	—8,126	+1,092	+6,414	..	..	..	..	..
	1901—1911	+20,954	—26,252	—6,086	..	..	..	..	..
	1891—1901	—20,062	+332,340	—391,356	..	..	..	..	..
	1881—1891	+15,461	..	+9,251	..	..	..	..	..
	1881—1921	+8,227	+307,180	—381,777	..	..	..	..	..
Sub-Himalaya, East.	1911—1921	..	..	—662,630	+786,007	—356,710	+472,366	..	..
	1901—1911	..	..	—480,291	+552,653	—357,385	+537,130	..	..
	1891—1901	..	..	+12,495	+27,479	—50,493	+29,281	..	..
	1881—1891	..	—636,423	+685,130	—325,283	+218,847	+893,379	..	..
	1881—1921	..	—636,423	—415,296	+1,040,859	—545,714	+1,938,159	..	..
Indo-Gangetic Plain, East.	1911—1921	..	..	..	—233,441	+813,258	—660,704	..	+98,009
	1901—1911	..	..	..	+474,751	—475,920	+365,674	—674,752	+6,735
	1891—1901	..	..	..	+211,125	+1,037,520	—1,346,129	—299,366	—22,926
	1881—1891	..	..	..	—215,105	—505,033	+276,701	+716,409	+17,954
	1881—1921	..	..	..	+237,330	+860,835	—1,364,458	—257,309	+99,772

Subsidiary Table VI.—*Variation by tahsils classified according to density*
(b) *proportional variation.*

Natural Division.	Period.	(b) Variation in tahsils with a population per square mile at commencement of decade of —							
		Under 150.	150 to 300.	300 to 450.	450 to 600.	600 to 750.	750 to 900.	900 to 1,050.	1,050 and over.
1	2	3	4	5	6	7	8	9	10
United Provinces (British Territory.)	1911—1921..	—6·8	+8·9	+4·7	—5·0	—9·1	—5·2	+88·5	—29·1
	1901—1911..	—3·0	—2·7	+29·9	+·1	—11·2	+22·2	—51·7	—18·8
	1891—1901..	+6·5	+2·3	+24·0	—15·5	+14·2	+31·8	+6·2	+17·2
	1881—1891..	+163·7	—18·9	—2·8	—7·5	+32·9	+36·2	+10·6	+58·3
	1881—1921..	+154·0	—11·0	—7·1	+1·5	+22·5	+7·7	+12·7	+9·7
Himalaya, West ..	1911—1921..	—16·3	+165·2	—100·0	..	..	..	..	..
	1901—1911..	+9·9	—17·6	+100·0	..	..	..	..	..
	1891—1901..	+17·7	—28·3	—100·0	..	..	..	..	..
	1881—1891..	+610·2	..	..	..	..	..	..	..
	1881—1921..	+669·0	..	..	..	..	..	..	..
Sub-Himalaya, West	1911—1921..	..	+32·9	—15·1	+7·3	—44·0	..	—1·4	..
	1901—1911..	..	+3·5	+16·2	—25·6	+64·3	..	+100·0	—100·0
	1891—1901..	—100·0	+23·8	—2·6	+3·9	+8·2	..	—100·0	+100·0
	1881—1891..	+100·0	—43·1	+11·3	+30·0	—43·7	..	+4·5	..
	1881—1921..	..	+3·8	+6·9	+9·7	—43·9	..	+9·9	..
Indo-Gangetic Plain, West.	1911—1921..	..	..	+26·9	—11·3	—22·5	—2·0	—13·3	—2·3
	1901—1911..	..	—100·0	+92·5	—15·2	+3·7	—65·7	—2·2	+3·9
	1891—1901..	..	+4·8	—57·6	+29·3	+55·0	+30·0	—100·0	+6·7
	1881—1891..	..	—5·0	+7·3	—5·5	+14·0	+3·8	..	+2·2
	1881—1921..	..	—100·0	+10·5	—8·1	+41·9	—54·6	+∞	+0·9
Indo-Gangetic Plain, Central.	1911—1921..	..	—4·7	+64·8	—11·5	.. 19·9	—1·6	+∞	—60·5
	1901—1911..	..	+1·4	+4·1	+8·1	—24·0	—100·0	—100·0	—5·0
	1891—1901..	..	—14·1	+37·4	+4·9	—10·5	—100·0	+100·0	+1·5
	1881—1891..	..	—27·4	—61·6	—80·4	+250·4	+8·6	—100·0	+169·1
	1881—1921..	..	—39·8	—9·4	—10·1	+90·7	—5·9	+14·0	+2·4
Central India Pla- teau.	1911—1921..	+90·7	—4·8	—51·0	..	..	..	..	..
	1901—1911..	—61·2	+7·7	+105·2	..	..	..	..	..
	1891—1901..	+15·0	—13·2	+9·0	..	..	..	..	..
	1881—1891..	+10·1	+2·2	—9·0	..	..	..	..	..
	1881—1921..	—6·7	—9·1	—0·3	..	..	..	..	..
East Satpuras ..	1911—1921..	—3·3	+0·4	+3·6	..	..	..	..	..
	1901—1911..	+4·9	+1·9	—1·2	..	..	..	..	..
	1891—1901..	—8·3	+100·0	—42·6	..	..	..	..	..
	1881—1891..	+6·8	..	+1·0	..	..	..	..	..
	1881—1921..	+3·7	+∞	—67·7	..	..	..	..	..
Sub-Himalaya, East	1911—1921..	..	..	—48·0	+49·5	—13·9	+24·3	..	..
	1901—1911..	..	..	—28·6	+53·4	—12·2	+38·1	..	..
	1891—1901..	..	..	+·7	+2·7	—1·7	+2·1	..	..
	1881—1891..	..	—100·0	+58·9	—24·4	+7·9	+186·9	..	..
	1881—1921..	..	—100·0	—38·2	+78·2	—19·7	+408·0	..	..
Indo-Gangetic Plain, East.	1911—1921..	..	..	..	—24·9	+34·2	48·8	..	+17·4
	1901—1911..	..	..	..	+102·6	—16·7	+37·0	—100·0	+1·2
	1891—1901..	..	..	..	+83·9	+57·2	—57·7	—30·7	—3·9
	1881—1891..	..	..	..	—46·1	—21·8	+13·4	+278·4	+3·2
	1881—1921..	..	..	..	+50·9	+37·5	—66·8	—28·0	+17·7

Subsidiary Table VII.—*Persons per house and houses per square mile.*

Serial number.	District and natural division.	Average number of persons per house.					Average number of houses per square mile.				
		1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11	12
	United Provinces (British Territory.)	4.6	4.6	5.5	5.7	6.4	93	92	81	77	65
	<i>Himalaya, West</i>	<i>4.4</i>	<i>4.6</i>	<i>5.2</i>	<i>5.7</i>	<i>6.4</i>	<i>23</i>	<i>22</i>	<i>18</i>	<i>16</i>	<i>11</i>
1	Dehra Dun	4.5	4.4	4.4	5.3	4.4	40	39	34	26	28
2	Naini Tal	4.3	4.3	4.6	5.1	6.2	24	27	26	42	35
3	Almora	4.6	4.8	5.1	6.2	6.8	22	20	17	13	12
4	Garhwal	4.4	4.6	6.2	5.7	7.3	20	18	12	13	9
	<i>Sub-Himalaya, West</i>	<i>4.4</i>	<i>4.4</i>	<i>7.0</i>	<i>5.6</i>	<i>8.0</i>	<i>91</i>	<i>97</i>	<i>79</i>	<i>75</i>	<i>50</i>
5	Saharanpur	4.1	4.3	4.7	4.9	10.6	107	103	97	91	41
6	Bareilly	4.4	4.4	7.7	5.8	8.6	145	156	89	112	74
7	Bijnor	4.1	4.3	4.5	5.6	8.5	95	99	93	74	45
8	Pilibhit	4.5	4.5	4.6	6.1	7.0	62	79	71	58	47
9	Khori	4.7	4.6	5.8	5.8	5.8	65	67	53	53	48
	<i>Indo-Gangetic Plain, West</i>	<i>4.5</i>	<i>4.6</i>	<i>5.7</i>	<i>5.5</i>	<i>8.2</i>	<i>111</i>	<i>118</i>	<i>96</i>	<i>84</i>	<i>68</i>
10	Muzaffarnagar	4.5	4.5	6.3	6.9	7.8	105	108	85	68	59
11	Meerut	4.7	4.6	5.9	5.5	8.7	140	140	110	107	63
12	Bulandshahr	4.4	4.8	6.8	5.6	9.6	128	121	87	89	50
13	Aligarh	4.1	4.6	5.0	5.9	8.2	121	127	122	90	64
14	Muttra	4.3	4.3	6.0	5.5	7.8	97	105	88	90	59
15	Agra	4.7	4.5	4.7	5.5	5.9	107	123	121	100	89
16	Mainpuri	4.5	4.6	4.7	5.8	7.8	99	104	103	77	60
17	Etah	4.5	4.6	5.0	6.3	7.5	106	108	99	64	51
18	Budaun	3.6	4	5.1	5.6	8.7	135	118	101	80	51
19	Moradabad	4.7	4.5	6.0	5.8	7.0	112	122	83	89	64
20	Shahjahanpur	4.6	4.5	6.4	6.3	6.9	105	121	82	81	70
21	Farrukhabad	4.6	4.5	6.8	6.5	6.8	110	120	80	77	78
22	Etawah	4.4	4.8	6.1	6.0	6.8	98	93	77	72	62
	<i>Indo-Gangetic Plain, Central</i>	<i>4.3</i>	<i>4.5</i>	<i>5.3</i>	<i>5.1</i>	<i>5.1</i>	<i>121</i>	<i>120</i>	<i>109</i>	<i>105</i>	<i>99</i>
23	Gawnpore	4.0	4.1	5.9	5.1	5.9	122	117	91	101	84
24	Fatehpur	4.4	4.3	5.0	5.1	5.2	89	91	85	85	80
25	Allahabad	4.4	4.3	4.8	5.2	5.1	112	118	108	105	102
26	Lucknow	4.2	4.4	5.2	5.2	5.3	179	178	157	154	133
27	Unao	3.6	4.4	5.8	5.7	5.9	127	114	97	91	87
28	Rao Baroti	4.1	4.5	5.2	5.3	5.3	129	130	113	105	101
29	Satapur	4.7	4.7	5.7	6.2	6.3	101	108	86	77	67
30	Hardoi	4.8	4.6	4.8	6.0	6.7	97	104	98	79	61
31	Fyzabad	4.7	4.5	5.1	5.2	5.2	113	147	139	135	122
32	Sultanpur	4.5	4.6	4.9	4.1	4.9	131	131	129	120	113
33	Partabgarh	4.4	4.6	5.1	5.3	4.4	131	135	122	120	135
34	Bara Banki	4.4	4.5	5.3	5.3	5.5	135	138	130	122	107
	<i>Central India Plateau.</i>	<i>4.4</i>	<i>4.3</i>	<i>5.0</i>	<i>5.3</i>	<i>6.1</i>	<i>46</i>	<i>49</i>	<i>40</i>	<i>42</i>	<i>35</i>
35	Jhansi	4.2	4.3	5.2	5.3	6.6	33	43	33	36	25
36	Jalaun	4.6	4.5	5.4	5.6	6.3	56	58	59	47	45
37	Hamirpur	4.1	4.2	4.9	5.1	6.1	43	49	41	40	36
38	Banda	4.2	4.3	4.1	5.0	5.7	49	53	41	45	41
	<i>East Satpuras</i>	<i>4.6</i>	<i>4.7</i>	<i>5.4</i>	<i>5.6</i>	<i>6.4</i>	<i>36</i>	<i>41</i>	<i>38</i>	<i>40</i>	<i>34</i>
39	Mirzapur	4.6	4.7	5.4	5.6	6.4	36	41	38	40	34
	<i>Sub-Himalaya, East</i>	<i>5.2</i>	<i>5.1</i>	<i>5.7</i>	<i>5.9</i>	<i>5.8</i>	<i>117</i>	<i>122</i>	<i>100</i>	<i>95</i>	<i>85</i>
40	Gorakhpur	5.4	5.3	5.7	5.9	5.8	135	132	111	110	98
41	Basti	5.3	5.2	5.7	6.0	6.1	130	125	117	107	97
42	Gonda	4.8	4.9	5.4	5.8	6.2	108	101	91	87	71
43	Bahraich	4.8	4.7	5.8	5.5	4.9	81	81	68	68	65
	<i>Indo-Gangetic Plain, East</i>	<i>5.0</i>	<i>4.8</i>	<i>5.6</i>	<i>6.2</i>	<i>6.6</i>	<i>112</i>	<i>116</i>	<i>133</i>	<i>130</i>	<i>117</i>
44	Benares	4.8	4.7	5.9	6.8	8.0	183	185	118	131	112
45	Jaunpur	4.6	4.7	5.1	5.7	5.9	160	158	144	143	132
46	Ghazipur	6.0	4.9	5.5	5.9	6.1	160	122	119	125	113
47	Ballia	5.0	4.9	6.5	6.9	7.3	134	138	121	117	111
48	Azamgarh	4.9	4.9	5.3	6.1	6.5	141	138	135	131	114

Chapter II.—THE POPULATION OF CITIES, TOWNS, AND VILLAGES.

3

THE previous chapter dealt with the numbers of the people and with their distribution in the different parts and sub-divisions of the province. In the present chapter will be examined the conditions under which, within those parts and sub-divisions, the people live. The statistics which bear on this subject are set out in Imperial Tables III, IV, and V, and in more compendious form in the Subsidiary Tables placed at the end of the chapter

*The statistics
where shown.*

2. In these statistics the whole population is classified as "rural" or "urban," and in more detail as living in villages, towns, and cities of different sizes. A "village," for census purposes, was defined as under—

Definitions.

A village denotes the area demarcated for revenue purposes as a *mauza*: provided that where such a village, or part of a village, forms part of the area of a town, it will be included in such town.

Explanation.—A village includes all the hamlets situated within the area of the revenue *mauza*.

The definition of a town was more complex, and was based partly on the mere aggregation of human beings, partly on the existence of regulations of a municipal character. It ran as follows:—

A town is—

(i) Every continuous group of houses permanently inhabited by not less than 5000 persons.

(ii) Every area in which Act II of 1914 or Act II of 1916 is in force.

Explanation 1.—Where several villages lie so close together that their houses form a continuous group with a population exceeding 5000, such group is a town.

Explanation 2.—Where one village is broken up into distinct groups of houses, none of which contains more than 5000 inhabitants, then though the total population exceeds 5000, the village is not a town.

Explanation 3.—Where separate groups of houses have been united for the purposes of the Acts mentioned above, they will be considered one town.

A "city" was defined simply as a large town declared to be such by the Local Government. The list of cities, twenty-four in number, given in Subsidiary Table IV, is the same as that of last census.

The "urban" population is the sum of the people living in towns and cities. The "rural" population is what remains: besides people living in villages it includes those found in the forests which are not demarcated into revenue *mauzas*. These latter consist mainly of grass-cutters, sawyers, and the like, are not permanent residents of the places where they were enumerated, and need not be considered further.

3. The people of the province whether living in villages in towns or in cities are gregarious by habit, and their houses whether rural or urban are huddled together in congested sites. The only exceptions to this rule are, in the country, an occasional religious devotee with a hut upon the roadside, or the occasional keeper of a railway-crossing; and in the cities, an increasing number of Indians of the professional classes who live in European or semi-European style in Civil Lines or Cantonments. The isolated country house or farm so familiar in Europe has no counterpart here. Many villages, especially in the eastern divisions, are split up into hamlets, but the hamlets in turn are as congested as the parent site. This gregariousness is undoubtedly a survival from the troublous times when men had to unite for mutual protection,¹ and is most marked in the West, where the country has not enjoyed so long a period of security as has the East.

*Urban and
rural
housing
and density.*

These facts should be borne in mind when rural and urban densities are compared. If village densities were calculated on the area of the inhabited site, and not on that of the site *and* the village lands, they would generally be greater than that of any town. Only in the heart of the larger cities, where the substantial brick masonry of the houses will support

¹ That the village planners of old time adopted where possible the motto "safety first" is obvious in parts of Bundelkhand, where the oldest villages are located at the base of a rocky hill—a position with the advantage of providing a handy refuge for the villagers, but with almost every possible disadvantage in other respects.

a second or third storey, are human beings herded together on a scale which is not general all over the country. In the outskirts of cities and towns, as in the villages, houses are ordinarily made of mud where the local soil will bind, and of wattles where it will not. Stone is in general use as a building material nowhere but in the hills, in Bundelkhand, and in parts of the Muttra and Agra districts; and in none but Himalayan villages are double-storeyed houses to be seen.

*City densities:
the meaning
of the figures.*

4. It is impossible within the compass of the Imperial or Subsidiary Tables to exhibit the density of cities in any way which is wholly satisfactory. In cities which are the headquarters of a district (or State)—that is to say, in all but Amroha, Hathras, and Sambhal—the municipal area includes the civil station; and civil stations contain open spaces so large as to render the mean density inapplicable to any considerable part of the municipality. Outlying open spaces also affect the density appreciably where two towns go to form one municipality, as in the case of Farrukhabad-Fatehgarh, Fyzabad-Ajodhya, and Mirzapur-Bindhachal. To discount these disturbing elements for all cities so as to give uniform results in a table was found to be impracticable: but a special study with reference to density has been made of the four cities known to be, in different respects, the most overcrowded in the province—Cawnpore, Lucknow, Allahabad, and Benares. The results of the study are given in an appendix at the end of this volume, and reveal in small local units a degree of density which would not be suspected from the figures of Subsidiary Table IV.

*The urban and
rural
population: va-
riation, and
the causes of
variation.*

5. An endeavour has been made, before summarising the main statistics dealing with the urban and rural population, to indicate what the distinction between urban and rural population amounts to. If civil stations and cantonments, which are innovations of Western origin, be left out of account, the people whether urban or rural live under conditions similar in terms of residential space, and dissimilar only in that the former enjoy the advantages, not always appreciated, of organised public services. These services vary in extent from the most primitive attempts at sanitation in the smaller towns, to the provision of water-supply, drainage, and electric lighting in the largest cities. The two classes of population differ much more in their composition, the rural class being predominantly agricultural, and the urban class commercial, professional, and to some extent industrial.

Out of every thousand persons in the province, 106 are "urban" and 894 are "rural." A contrast has already been made between this proportion and that found in England and Wales, where out of every thousand 793 are urban and 207 are rural. In England and Wales a few places with populations as small as 2000 are classed as towns, but the criterion of municipal institutions is the same as here, and if all places with populations of less than 5000 were excluded the proportion would not be affected appreciably. The difference is due partly to the greater volume of commerce, partly to the greater scope afforded to the professions by a more complex social organisation, but overwhelmingly to the greater industrial development of the British Isles.

In the margin are shown the provincial proportions for the last fifty years¹.

Number per thousand of the total population who live in towns.					
1921.	1911.	1901.	1891.	1881.	1872.
106	102	112	108	109	96

The figure for 1872 is of doubtful significance; for the census of that year is not believed to have been very accurate. The figure for 1911 is also of little value: for in March 1911 many towns had been evacuated on account of plague. It will be seen that the urban population, though it has doubtfully increased since 1872, has decreased slightly but unmistakably since 1881. The decrease was checked in 1901, but this was due not to urban prosperity but to rural calamity; for the feature of the previous decade was famine. The decrease indicates not merely that there has been no appreciable development of commerce or industry to attract people from the country to the town. There has certainly been no rural development to attract people from the town to the country; yet the urban population has failed to keep pace by natural increase with the population as a whole. The conclusion can only be that the towns, in spite of their municipal regulations, are less healthy than the villages.

¹ The calculations are made on the figures for 423 towns which have been classed as such at every census.

This relative unhealthiness of towns must be due, if what has been said above is correct, either to the municipal regulations themselves, or to the manner of life of the commercial, professional, and industrial as compared with that of the agricultural population. To take the second supposition first, it can scarcely account for the facts so far at any rate as this decade is concerned. The influenza epidemic of 1918 occurred at the busiest period of the agricultural year, when the autumn harvest had to be got in and the land prepared for the spring crop. At this period to stop work means to the peasantry at worst ruin and at best serious loss. According to medical opinion the only treatment for influenza is absolute rest and good nursing. This treatment was more or less possible for town dwellers in the autumn of 1918, but for the cultivators it was not. These latter carried on at their work after they had felt the onset of the disease and until they were no longer able to stand, as was witnessed probably by all who were on tour in their districts at the time.

One is forced therefore in looking for a cause for the unhealthiness of towns, to enquire whether municipal regulations may not be to blame. The figures in the margin bear on this enquiry.

Number per 10,000 of the total population live in cities.

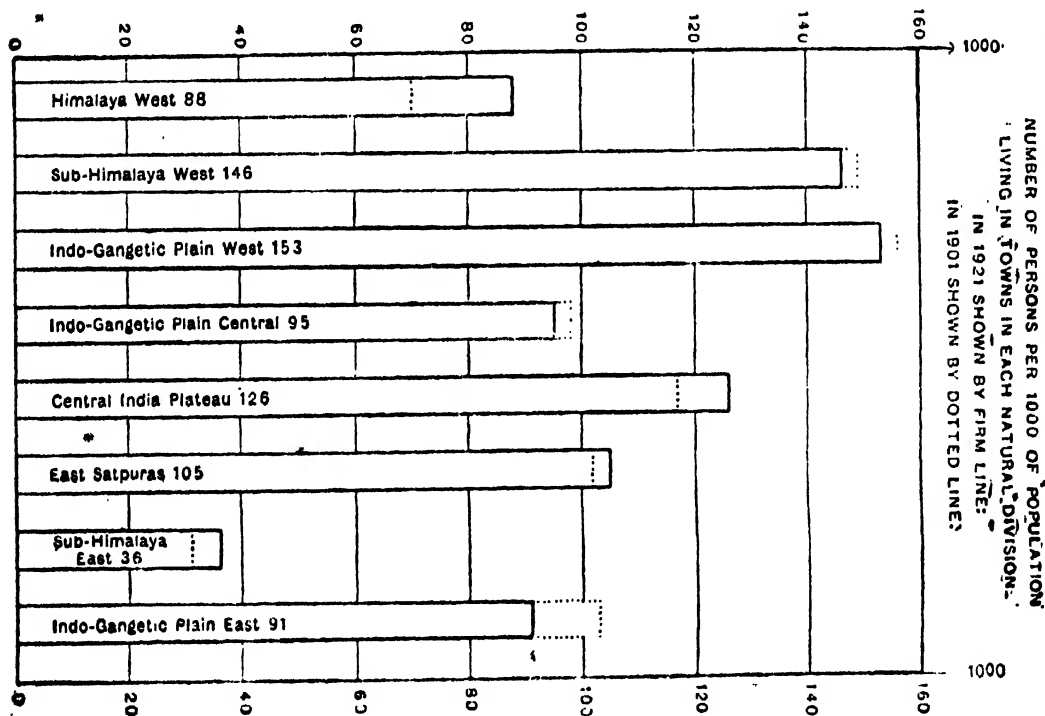
1921.	1911.	1901.	1891.	1881.	1872
469	452	472	473	467	425

These figures show the proportion to the whole population of persons living in the twenty-four cities. Leaving out of account, for reasons already given, the years 1872 and 1911, it appears that the population of cities has kept pace with that of the whole country. These cities, unlike the major-

ity of the towns, have in the past had the advantage—due to their being the headquarters of a district—of constant supervision over their institutions by trained officers, and in recent times have undertaken drainage, water-supply, and similar schemes on modern lines. The figures suggest that a partial and unsupervised substitution of Western for Eastern ways of life is not, at any rate immediately, beneficial to the health of the community.

6. The diagram on this page shows the relative urbanization of the Natural

The relative urbanization of the natural divisions: and the variation thereof.



Divisions. The position of twenty years ago is shown by a dotted line. To illustrate the facts completely the rectangles should be reduced to one-sixth of the size exhibited. The urban population of Himalaya West is concentrated almost entirely in the hill sanatoria. Of the rest, the comparatively high figure of the Plateau and of East Satpuras is due rather to the low density of the

¹ The word "municipal" throughout this discussion means "municipal and quasi-municipal" and does not refer to municipalities only.

countryside than to the number or congestion of the towns. Sub-Himalaya East is relatively new country, and is largely served by towns outside its own borders which had established themselves before it had been fully developed. In the older country of the plains proper urbanization increases regularly from East to West. This fact has always been attributed to the preference for town life of Muhammadans, who relatively to Hindus are concentrated increasingly in the same direction. But the people of the West are generally more gregarious than those of the East, and for this gregariousness reasons other than of race have already been suggested.

To consider the changes that have occurred in the last twenty years, town has lost to country in the older and has gained on country in the newer divisions. It has already been argued that the losses are due to the absence of industrial development combined with the relative unhealthiness of towns. The exceptionally large losses of the Eastern Plain—a tract with few small towns—are accounted for by the decline of the cities of Benares and Jaunpur. The gains are to be attributed in the case of the Himalaya to the growth of the hill sanatoria, and in the case of Sub-Himalaya East and of the Plateau to railway development.¹ No generalization is possible in the case of East Satpuras, for its figures are almost wholly determined by the vicissitudes of a single city.

The twenty-four cities.

City.	Population in 1901.	Variation, 1921.	
Cawnpore	2,02,797	+18,639	
Jhansi	55,724	+10,708	
Meerut	1,18,129	+ 4,480	
Moradabad	75,128	+ 7,548	
Budaun	39,031	+ 87	
Etawah	42,570	— 1,012	
Agra	1,88,022	— 2,490	
Amroha	41,071	— 623	
Sambhal	42,838	— 1,253	
Bareilly	1,39,167	— 3,708	
Hathras	42,578	— 3,815	
Koil-Aligarh	70,484	— 3,471	
Saharanpur	66,254	— 3,993	
Shahjahanpur	76,458	— 3,842	
Rampur	78,758	— 5,603	
Allahabad	1,72,032	—14,812	
Benares	2,13,079	—14,632	
Farrukhabad	67,338	—15,771	
Fyzabad	71,179	—14,559	
Gorakhpur	64,148	— 6,163	
Jaunpur	42,771	—10,202	
Lucknow	2,64,049	—23,483	
Mirzapur	66,071	—11,077	
Muttra	60,042	— 7,202	

commercial entrepôt of the Province. Jhansi also shows a large increase, as would be expected in view of its growing importance as the principal up-country junction and headquarters of the Great Indian Peninsula Railway system and as a garrison town. Meerut and Moradabad have expanded but not to the same extent. The former is the centre of the richest part of the province, and its trade has probably benefited by the transfer of the Imperial capital to Delhi. Moradabad has considerable industries.

Budaun is stationary, and Etawah, Agra, Amroha, Sambhal, and Bareilly show only small decreases. Those cities would probably have prospered but for conditions of health: the four last-named are largely industrial. Big decreases have been suffered by Hathras, Koil-Aligarh, Saharanpur, Shahjahanpur, and Rampur. Except Rampur, these are all cities where an increase would be looked for, for all have thriving industries. The setback here also is probably temporary.

The cities showing very large decreases are Allahabad, Benares, Farrukhabad, Fyzabad, Gorakhpur, Jaunpur, Lucknow, Mirzapur, and Muttra. With

¹ The only railway which has expanded on a large scale in recent years is the Bengal and North-Western Railway which centres on Gorakhpur. The Plateau has been opened up during the decade by the Cawnpore-Banda line, while the Jhansi-Manikpur line is not very old.

Railway extension has been interrupted by the War, and the only important additions since 1911 are the Cawnpore-Banda line (Great Indian Peninsula Railway) just mentioned, and the Captainsganj-Savan line (Bengal and North Western Railway) opening up the Padrauna tahsil of the Gorakhpur district. Railway development has not been sufficient to merit treatment in the text of this report.

the exception of Gorakhpur, whose case is surprising¹, these are all cities which live in the past. Allahabad, Benares, and Muttra have probably lost none of their religious importance. But these, as well as Farrukhabad, Fyzabad, and Mirzapur, owed much or all of their former prosperity to their situation on the great waterways, whose function as the arteries of trade has now been usurped by the railways. Jaunpur and Lucknow are the widowed capitals of extinct dynasties, and if they are to survive need to replace their fading memories by something more substantial. Lucknow has indeed some manufactures, but at present on a very modest scale.

Besides these two, the cities whose losses are most serious are Farrukhabad and Allahabad. Farrukhabad has a large agricultural population, and much intensive cultivation in its suburbs, and, as was suggested in the last chapter, has probably suffered from the operation of the law of diminishing returns. Allahabad enjoys great advantages both as the centre of a network of railways and as the headquarters of a multitudinous Secretariat: but for this the capital of the province there appears to be no hope. Its importance as a place of pilgrimage is merely seasonal; and it has long been notorious as a city which produces nothing except written matter, and imports even its waste-paper baskets.

8. The distribution of the population in towns and villages of different sizes is shown in Subsidiary Table I, to which the reader is referred. It would ordinarily be of interest to show this in diagrammatic form. The diagram however if drawn on the facts of this or of the last census would be misleading; as regards last census, on account of the residential dislocation caused by plague; and as regards the present census, because the province has recently been devastated by an epidemic of which one of the most outstanding features was its uneven and apparently capricious incidence as between small local units. An examination of distribution from this point of view must therefore stand over, in the hope that the conditions of the next decade may be more normal.

The distribution of the population in towns and villages of different sizes.

¹ It is a city however which for the last twenty years has hardly ever been free from plague.

Subsidiary Table I.—*Distribution of the population between towns and villages.*

Natural Division.	Average population per		Number per mille residing in		Number per mille of urban population residing in towns with a population of				Number per mille of rural population residing in villages with a population of			
	Towns.	Villages.	Towns.	Villages.	20,000 and over.	10,000 to 20,000.	5,000 to 10,000.	Under 5,000.	5,000 and over.	2,000 to 5,000.	500 to 2,000.	Under 500.
			4	5	6	7	8	9	10	11	12	13
1	2	3										
United Provinces (including States)												
	10,627.19	377.08	105.79	894.21	*497.08	*168.98	*196.53	*137.39	3.92	81.26	512.31	402.51
(1) Himalaya, West ..	5,524.56	130.95	88.12	911.88	252.66	262.02	298.25	187.07	3.79	29.91	107.08	859.22
(2) Sub-Himalaya, West ..	11,536.69	408.86	146.14	853.86	414.55	293.13	167.88	124.44	4.86	86.63	524.88	333.63
(3) Indo-Gangetic Plain, West ..	10,221.31	515.25	153.16	846.84	515.61	118.70	207.58	158.11	9.64	128.05	557.21	311.10
(4) Indo-Gangetic Plain, Central ..	13,163.87	432.52	94.97	905.03	590.71	155.29	131.81	116.19	2.54	65.18	554.12	378.16
(5) Central India Plateau ..	8,657.90	439.61	115.76	874.24	286.49	278.83	278.39	156.79	..	98.34	565.48	336.18
(6) East Satpuras ..	15,196.20	218.23	104.92	895.08	723.79	..	218.62	57.59	..	26.51	351.56	621.93
(7) Sub-Himalaya, East ..	8,707.44	398.21	36.04	963.96	279.46	252.57	326.69	141.28	..	60.46	521.14	418.40
(8) Indo-Gangetic Plain, East ..	11,339.21	310.44	90.74	909.26	530.50	154.83	210.76	103.91	3.06	73.08	478.82	447.04
States.												
Tehri-Garhwal (Himalaya, West) ..	..	116.38	..	1,000.00	..	..	..	..	..	10.50	1.71	987.99
Rampur (Sub-Himalaya, West) ..	15,885.33	330.23	210.12	789.88	767.54	..	133.60	98.86	..	50.23	486.63	463.94
Benares (East Satpuras) ..	3,922.00	220.57	54.04	945.96	..	546.81	..	453.19	..	9.75	323.38	687.87

* These figures differ appreciably from those of column 2 of subsidiary Table III of this Chapter because the former are based on Imperial Table V which separates cantonments and notified areas from their adjoining municipalities, while the latter are based on Imperial Table IV, which groups them together.

Subsidiary Table II.—*Number per mille of the total population and of each main religion who live in towns.*

Natural division.	Number per mille who live in towns out of			
	Total population.	Hindus.	Muhammads.	Others.*
1	2	3	4	5
United Provinces (including States)	106	74	274	318
1. Himalaya, West	88	53	330	556
2. Sub-Himalaya, West	146	91	298	317
3. Indo-Gangetic Plain, West	153	108	350	238
4. Indo-Gangetic Plain, Central	95	67	276	732
5. Central India Plateau	125	103	424	488
6. East-Satpuras	105	75	250	571
7. Sub-Himalaya, East	96	29	78	365
8. Indo-Gangetic Plain, East	91	70	282	509

*NOTE.—Figures for "Others" (and not for "Christians" as in 1911) have been given because (a) the Christian has been displaced as the main minor religion by the Arya, (b) the figures for Christians have been to some extent understated, at this Census.

Subsidiary Table III.—*Towns classified by population.*

Class of town.	Proportion to total urban population.	Number of females per thousand males.	Variation per cent in towns as classed at previous census.					Increase per cent, in urban population of each class from 1872.	
			1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.	In towns as classed in 1872.	In the total of each class in 1921 as compared with the corresponding total in 1872.
1	2	3	4	5	6	7	8	9	10
I. 100,000 and over	25.41	765	+1.01	-3.58	+1.15	+8.08	+8.57	+15.33	+28.90
II. 50,000 and 100,000	14.19	814	-1.96	-8.61	-0.31	+5.35	+10.95	+7.80	+31.38
III. 20,000 and 50,000	11.68	807	+5.97	-9.81	+0.90	+7.66	+18.23	+18.24	+24.66
IV. 10,000 and 20,000	15.85	857	-2.58	-8.08	+1.09	+2.57	+4.95	-1.69	+2.95
V. 5,000 and 10,000	19.42	875	-5.31	-10.98	+2.48	-0.48	+10.62	+8.49	+3.06
VI. Under 5,000	13.45	863	+0.74	-4.15	+5.27	+1.42	+12.28	+8.74	+109.95

†N. B.—The figures for these columns are vitiated by two facts for which allowance has been made as far as possible—(1) that the Census of Oudh province was taken in 1869 not 1872; (2) that towns below 5,000 were not classified as such in either province.

Subsidiary Table IV.—*Cities.*

Serial number.	City.	Population in 1921.	Number of persons per square mile.	Number of females to 1,000 males.	Population of foreign born per mille.	Percentage of variation.					
						1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.	1872 to 1921.
1	2	3	4	5	6	7	8	9	10	11	12
1	Agra	185,532	11,000	803	119	±0.	-1.37	+11.48	+5.28	+7.51	+24.5
2	Allahabad	157,220	10,250	783	266	-8.14	-1.19	+9.44	+9.44	+11.42	+9.55
3	Amroha	40,448	10,870	1,024	32	-4.63	+5.82	+13.76	-2.53	+3.56	+13.1
4	Bareilly	129,459	10,800	860	128	±0.	-2.8	+8.40	+6.72	+10.13	+23.85
5	Benares	193,447	19,930	873	140	-2.6	-4.4	+4.62	+2.19	+22.59	+11.8
6	Budaun	39,118	43,400	918	77	+2.32	-2.05	+9.37	+5.02	+1.07	+21.06
7	Cawnpore	216,436	22,620	676	425	+21.25	-12.0	+4.48	+24.61	+23.36	+71.8
8	Etawah	41,558	11,840	949	229	-8.36	+6.53	+9.71	+11.44	+13.65	+36.0
9	Farrukhabad-cum-Fatehgarh	51,507	13,210	835	149	-13.54	-11.42	-13.70	-2.17	+7.70	-34.9
10	Fyzabad-cum-Ajodhya	56,620	4,508	760	218	+3.60	-23.2	-4.86	+10.53	+88.88	+58.1
11	Gorakhpur	57,985	10,235	862	138	+1.92	-11.31	+8.3	+6.20	+17.20	+13.44
12	Hathras	38,763	12,110	753	414	+2.40	-11.09	+8.67	+12.10	+48.69	+64.8
13	Jaunpur	32,669	5,015	875	85	+6.88	-28.75	-11	-06	+83.67	+39.6
14	Jhansi	66,432	16,250	893	230	-5.38	+25.99	+8.62	+63.03	+4.96	+121.44
15	Koili (Aligarh)	66,963	15,940	761	280	+0.955	7.95	+11.30	-1.53	+6.67	+11.76
16	Lucknow	240,566	1,850	812	229	-4.58	-1.61	-3.29	+4.49	-8.24	+12.95
17	Meerut	122,609	15,542	809	210	+5.125	-1.61	-1.06	+19.91	+22.34	+50.2
18	Mirzapur-cum-Bindhachal	54,994	15,660	919	64	+70.2	-51.1	-5.07	+1.44	+26.88	-1.4
19	Moradabad	82,871	19,000	851	106	+1.915	+8.00	+3.03	+5.15	+11.12	+32.5
20	Muttra	52,840	15,770	830	83	-9.19	-3.10	1.88	+6.01	-2.63	-10.86
21	Saharanpur	62,361	10,865	727	165	-0.94	-5.14	+4.84	+6.76	+35.01	+41.9
22	Sambhal	41,585	17,340	937	25	-8.10	+14.00	+6.69	+5.74	-25.07	+16.2
23	Shahjahanpur	72,616	19,700	922	108	+1.17	-6.12	-2.63	+1.44	+7.30	+0.66
24	Rampur	73,156	29,250	872	58	-1.56	-5.64	+2.64	+3.34	..	-1.475

NOTE.—Population in 1921 and variations in population are shown on populations of cities plus cantonments. The figures for columns 4 and 5 are calculated on municipal figures only to exclude cantonment anomalies of areas and sexes. Areas of cities are as in 1911 with adjustments for changes in Koili (Aligarh). The municipal area figures are not guaranteed.

Chapter III.—BIRTHPLACE.

The absolute statistics of birthplace are set out in Imperial Table XI. The Subsidiary Tables printed at the end of this chapter exhibit these statistics in a concise form and from various aspects.

The statistics of birthplace where found.

I have no doubt that the figures are reasonably accurate, though much labour was required, especially in the Head Office, to make them so. A part of the training of the enumerating staff was to impress upon it the importance of making an identifiable entry in the birthplace column, and most stress was laid on the necessity of naming a local unit not smaller than a district, and of avoiding absolutely the entry of tahsil or village names. The instructions in this respect were followed except in negligibly few instances. Unfamiliar names were naturally rendered in strange ways when it came to spelling, and the designations of foreign countries were not always those to be found in books of reference. Many difficult and some entertaining problems were sent to me and my Personal Assistant from the Central Offices, and even more were left unsolved by them in their tables. But with some outside help we found the answer to most of these. Such as we failed to solve, or solved wrongly, were not so numerous as to affect the statistics.

Their accuracy.

As regards persons born in the province but enumerated elsewhere the figures are necessarily not based on the returns of the provincial census, but on data furnished by the Census Superintendents of the other provinces and states of India.

2. The statistics of birthplace are of value as giving some indication of the extent and nature of migration, or the movement of population from one place to another. The indication is by no means exact. For instance, a man *A* living at *X* marries a woman *B* living at *Y*. *B* migrates from *Y* to *X*. In accordance with a very common custom, she returns temporarily to her parents at *Y* for her confinements, or at any rate for her first confinement, and there gives birth to *C*. At the census *C* will be found at *X*, and will be shown as an immigrant. But he is not really such. Again, at the census *B* may be found at *Y*; or *D*, who as a boy left his home to work in the mills at *Z*, may on the day of the census be home on leave. Both are really migrants (the latter of the "semi-permanent" kind to be described later) but will not be recorded as such. Actual instances of this character (which might be exemplified indefinitely) are undoubtedly in the aggregate very numerous: but to some extent they cancel one another.

Birthplace how far an index of migration.

Birthplace statistics also fail to reflect migration exactly because the local units dealt with are arbitrary. A farmer having land in two adjacent villages lying on either side of a district border may leave one to reside in the other, and will then be returned as a migrant. A labourer may leave his village for a town fifty miles distant, but in the same district, and will not be returned as a migrant. Such instances will not cancel each other, but will tend to make migration appear less than it really is.

3. It has been customary in Indian Census Reports to distinguish five different types of migration. These are—

Migration distinguished in terms of duration.

- (1) Casual—or the minor movements between adjacent villages. The instance of this type usually given is where a girl goes to her husband's home after the *gauna* ceremony. For reasons into which it is unnecessary to enter here a Hindu ordinarily finds a wife in a village not his own, but as near to his own as possible. It seems to me that the distinction of a "casual" type of migration is due to a confusion of thought. Migration of the kind instanced is permanent. The only difference from migration classed as permanent in previous reports is that the distance traversed by the migrant is generally trifling. The distinction is one of space, not of kind.

I can conceive no kind of migration that is not of one of the remaining four types.

- (2) Temporary—due to journeys of business or pleasure, visits to places of pilgrimage, and temporary demands for labour. This of course is really not migration at all, but little more than travel, an accident disturbing the statistics of migration.
- (3) Periodic—due to the movements of people who change their quarters at certain seasons: such as the hillmen who cultivate intermittently in the Bhabar, and the pastoral nomads of the upper Himalaya: and of such agricultural labour as follows the harvest—for instance in parts of Bundelkhand, whence labourers stream into Malwa in the early hot weather. The hillmen have begun to move at the time of the census, but the bulk of the migratory labour of the plains begins to move later.
- (4) Semi-permanent—where the natives of one place reside and earn their living in another place, but retain their connection with their homes, returning there at intervals during their working lives and ultimately on retirement returning there permanently. This is the usual type of migration in this province. Instances are persons in public and private service, and the vast majority of operatives in mills and factories.
- (5) Permanent—where overcrowding drives people away, or the superior attractions of some other locality induce them to settle there permanently with their families. Apart from the marriage migration hitherto classed as “casual,” there is little migration of this character in the province at the present time. Settlers on reclaimed forest tracts may be instanced, but such tracts are rare: a small proportion of migrants who go overseas or to the Assam gardens does not return: and a few mill and factory operatives abandon their village homes and settle permanently in the towns.

As indicated above, there are really only three types of migration—periodic, semi-permanent, and permanent. The so-called “casual” type has no content: and the so-called “temporary” type is not migration at all, but needs to be eliminated so far as possible from the statistics before the true extent of migration can be gauged.

Migration distinguished in terms of direction.

4. The distinctions outlined in the last paragraph are distinctions in terms of duration. Migration must obviously also be distinguished in terms of direction. In this sense it is of three forms—

- (1) Internal migration, or movement between different parts of the province,
- (2) Immigration, and
- (3) Emigration.

Each of these forms may, if not merely temporary and therefore unreal, be either periodic, semi-permanent, or permanent. Migration can be classed exactly, on the basis of the census returns, in terms of direction. In terms of duration it can only be classed approximately by general inference.

In the following paragraphs each form of migration—internal migration, immigration, and emigration will be dealt with in turn.

Internal migration.

5. Out of every 1,000 persons found in the province (excluding the States) 931 were born in the district in which they were enumerated, 48 in a contiguous district of the province, and 11 in other districts of the province: the remaining 10 were immigrants and do not concern us here. These figures show eloquently how little addicted to movement is the population as a whole: in England and Wales the proportion of home-born to total population varies between 340 (Middlesex) and 832 (Cornwall and Norfolk). To take the figures for the sexes separately, 955 men and 905 women were born in the district of enumeration. The excess of migrant women over migrant men comes from contiguous districts of the province (71 women to 26 men), and is of course due to the operations of the marriage market.

In 1911 the proportion of the home-born was 912: while for the sexes the figures were 937 and 885.* It is clear that the increase in the proportion of the home-born is principally due to the decrease in the proportion of women

* The figures given in the last Report, 948 and 899, are incorrect.

to men which has occurred during the decade, and which is dealt with in the chapter on sex. Women who on marriage go to live with their husbands' families are obviously more migratory than men. For men only, the proportion of migrants to the total population is very slightly lower than before, and as it is only in the case of men that the causes of migration are not certain, it follows that there is in these figures nothing new to be explained, and that the influences that make for internal movement have not developed.

Out of every 1,000 men 37 are internal migrants: of these 27 have moved only from contiguous districts. If from the figures quoted are deducted the large but necessarily unknown number who must have been, on the night of the census, merely accidentally away from home, it is clear how very few of the population are forced or willing to leave their homes in search of work, and of these few what a small proportion is willing to go far afield. The statistics point to certain conclusions which are perhaps beyond the scope of this chapter: such as the apparent contentment of the peasantry, the immobility of labour, and the hopelessness of attempting to create an industrial population by concentrating industries in central places such as Cawnpore.

What little internal migration there is is very largely localised. The districts that gain thereby to an appreciable extent are Dehra Dun, Naini Tal, and Cawnpore. About a quarter of the male population of Dehra Dun recorded a birthplace outside the district. Much of this fraction is the labour on the tea gardens derived principally from Oudh. This labour is composed almost entirely of semi-permanent migrants, who have come in numbers varying from 1,000 to 500 from Bara Banki, Partabgarh, Sultanpur, Gonda, Fyzabad, Rae Bareilly, and Lucknow. About 4,500 males found in Dehra Dun were born in Garhwal and 4,000 in Tehri State. Some of these are also probably semi-permanent migrants, but most will be "periodic"—coolies who at the end of March are beginning to collect at Rajpur and Mussoorie for the summer season. Immigrants of both sexes numbering 10,000 from Saharanpur and 4,000 from Bijnor will be mainly permanent settlers.

In Naini Tal two-fifths of the male and one-third of the female population was born outside the district. 26,000 males and 17,000 females were born in Almora, and are periodic migrants cultivating the Bhabar. 10,000 of both sexes born in Rampur and 7,000 born in Bijnor are permanent or periodic settlers in the Tarai and the Kashipur tahsil. 16,000 born in Moradabad and 9,000 (6,000 males and 3,000 females) born in Bareilly are partly of the same character: but there is a large business connection between these two districts and Naini Tal. 3,000 men and 2,000 women born in Pilibhit will be mainly labourers employed on the Sarda Canal, and only temporary migrants.

Cawnpore derives 68,000 males and 58,000 females from outside the district. The details of this extraneous element are interesting: the proportion of the sexes gives a clear indication of the general nature of the migration. Where female migrants greatly predominate the connection is clearly one of marriage, and the migration is permanent for women and temporary for men, who will be mostly visiting relatives. This is the case of Fatehpur, Hamirpur, and Banda. Where males greatly predominate the connection is one of labour, and the migration is semi-permanent, men coming to the mills to work but leaving their families behind them. This is the case of the more distant districts, such as Gorakhpur (800), Azamgarh (1,500), and Allahabad (4,500). Where the sexes are more or less balanced, the migration is more or less permanent, labourers having come to the mills and brought their families with them. This is the case of Farrukhabad (9,000), Etawah (7,000), Jalaun (6,000), Unao (21,000), Rae Bareilly (7,000), Lucknow (7,000), and Hardoi (4,000).

From the details given above it will be seen that the districts that lose their inhabitants by internal migration are mainly those of Oudh. To them should be added the Rampur State, which loses 10,000 (6,000 males) to Naini Tal, 13,000 (4,000 males) to Bareilly, and 15,000 (4,500 males) to Moradabad. The reason in both cases is probably a comparatively unpopular system of land tenure.

The districts and states which gain practically no population from outside are those of the hills—Tehri, where out of 317 thousand inhabitants 314 thousand are home-born: Almora, where out of 326 thousand 321 thousand are home-born: and Garhwal, where out of 482 thousand 474 thousand are

home-born. The reason is obvious. The plainsman dislikes the climate and conditions of the hills, and has no social connection and only slight racial affinity with the hill people.

In respect of districts other than those mentioned internal migration calls for little comment. Districts containing industrial towns—such as Aligarh, Moradabad, Agra, and Bareilly—show a little movement similar in kind to (but much less in amount than) that which has been analysed in the case of Cawnpore. For the rest the figures reflect little more than the permanent migration connected with marriage and the accident of travel.

Immigration.

6. Immigration is proportionately very trifling. Out of every 1,000 persons enumerated 9 were born in other parts of India and 1 was born outside India.

The actual figures of immigrants from other parts of India are 426,000. Of those, 241,000 (76,000 males and 165,000 females) come from territory just over the provincial boundary, and 183,000 (93,000 males and 90,000 females) from further afield. The nature of this immigration is apparent from the proportion of the sexes. That from contiguous parts of the rest of India is, in respect of females, the permanent migration of marriage: and in respect of males mostly the temporary visiting due to marriage connection. The numbers are principally made up by movements from the neighbouring Punjab districts (Ambala, Karnal, and Gurgaon) into the Meerut Division, from Rajputana and Gwalior into the Agra Division, from the Central India Agency and Gwalior into Bundelkhand, and from the Champaran and Chapra districts of Bihar into Gorakhpur.

Immigration from more distant parts of India is for the most part semi-permanent and due to various causes. Bengalis are found everywhere, but in the greatest force in Benares and Lucknow. Only in the former are any number of them permanent settlers: elsewhere they are in public and private service. Immigrants from the more distant parts of the Punjab appear in Dehra Dun (and the Tehri State), the Naini Tal and Kheri districts, in which they are forest labourers: and in a number of cantonments, where they are soldiers. Movement from other parts of India is in no case of sufficient volume to call for comment. But it is noticeable that Lucknow is by far the most cosmopolitan district (or rather city) in the province.

Immigrants from countries outside India total 55,000, of whom 37,000 are males. Out of 36,836 Asiatics, 34,627 are from Nepal. These are mainly Gurkha soldiers, semi-permanent migrants who generally bring their families with them: but in part they are permanent settlers. They are concentrated in the Dehra Dun, Gorakhpur, Basti, and Bahraich districts and in the Kumaun Division. Africans and Americans (mostly missionaries) are negligible: so are Australasians. Immigrants from Europe total 17,477 (14,252 males and 3,225 females) of whom 17,272 come from the British Isles. These are of course in the public service, civil and military, or in business, and are semi-permanent migrants. They are mainly concentrated in the larger cities, especially Meerut (2,906) and Lucknow (2,670).

Emigration.

7. Accurate figures of emigration are available only for emigrants to other parts of India. As regards countries outside India, figures based on the census of 1921 have been furnished by Ceylon, British Malaya, Wei Hai Wei, Kenya, Nyassaland, Tanganyika Territory, and Southern Rhodesia. These are negligible. The number of natives of this province passing through Calcutta as indentured labourers for Demerara, Trinidad, Jamaica, Natal, Fiji, and Surinam is also on record. This emigration almost ceased in 1914 and was stopped altogether in March, 1917. In all only 41,248 persons born in the province (of whom 7,500 were born in Basti and 4,500 in Gonda) embarked from Calcutta during the decade: and as in the same period, in all India, one emigrant returned for every two that embarked (embarked 50,334: returned 25,567), there is revealed here no loss of population that need be taken into account.

Of emigration to Nepal there is no record. In 1911 Mr. Blunt believed it to be very considerable, and hazarded, on data not revealed, a figure of 150,000. Guesswork in such a matter is of little value: but having served for a number of years in the most congested district that borders Nepal, I believe this emigration to be practically non-existent.

There is no other foreign country to which any volume of emigration is even alleged.

I return, therefore, to emigration to other parts of India. In all 1,400,284 persons born in this province were enumerated in other provinces and states. Of this number, 576,000 (of whom 348,000 are females) were enumerated in contiguous administrations, and represent the *va et vient* of marriage. This migration, so far as females are concerned, is permanent: but the loss is to some extent compensated by the corresponding immigration which amounts, as stated above, to 76,000 males and 165,000 females. It will be seen that in its matrimonial dealings (mainly with the Punjab, Central India Agency, Gwalior, Rajputana, and Bihar) the province gives more wives than it receives: and the net loss of population under this head, making some allowance for the temporary movements of males, is about 200,000.

Emigration to more distant parts of India accounts for a loss of 623,000 males and 202,000 females. This, as the sex proportion shows, represents the movement of labour; and of the male labourers, to judge by the number of women that accompany them, some 200,000 are permanent and 400,000 are semi-permanent migrants. This loss of labour the province can ill afford, as will be shown in Chapter XII. The provinces that gain thereby are Bengal (343,000), Bombay (115,000), Burma (71,000), Central Provinces (102,000), and Assam (77,000). As regards the Central Provinces, the figures vary greatly from decade to decade, and it is evident (and is known to be the case) that they include a large volume of periodic migration connected with the harvest. Of the rest, Bengal attracts by its mills, factories, and coalfields, and by domestic service in the city of Calcutta: Bombay by its mills: Burma by trade and service: and Assam by its tea gardens. Since 1911 the number of emigrants in Bengal and Assam has largely decreased: in Bombay and Burma the numbers have largely increased. The demand for labour has probably been keener in the two latter provinces, where there remains more room than in the former for industrial and commercial development.

It is remarkable that in spite of the greatly increased demand for labour in this province that has been witnessed during the decade, the number of emigrants has not decreased appreciably. This fact bears out what must be the impression of anyone who has acted as an Emigration Officer under the Emigration Act—as the writer did for several years—that emigrants generally leave their homes not to better their prospects but to escape domestic unpleasantness.

Losses by emigration to distant provinces are borne mainly by the Eastern Plain, East Satpuras (North Mirzapur), the Gorakhpur district, and certain districts of the Central Plain—Allahabad, Lucknow, Rae Bareilly, Fyzabad, Sultanpur, and Partabgarh. The three first named tracts are highly congested. The case of Cawnpore is curious: having to import its labour, it also exports it. Probably artisans who have learnt their trade in the mills are attracted by better wages elsewhere. Distant emigration from Agra is balanced by corresponding immigration, and is largely due to marriage custom.

8. A balance may now be struck for the province of its effective losses by migration, as these stood on the night of the census. By marriage there is a net loss of 200,000 women: by migration of labour, a permanent loss of 200,000 each sex, and a semi-permanent loss of 400,000 men: the latter being set off by a semi-permanent gain of 93,000 male and 90,000 female immigrants. Roughly speaking, the movement of population may be estimated to have left the province poorer, permanently or for all practical purposes, by 500,000 men and 300,000 women, or by 800,000 persons in all.

Before leaving this subject it is necessary also, in order to justify what was said in Chapter I (paragraph 8) when dealing with the vital statistics, to consider the balance of emigration over immigration from another point of view. Emigration of all kinds to other parts of India exceeds immigration of all kinds by 975,000. Emigration to foreign countries may increase the balance to a million. But this million includes all emigrants living on the night of the census: only a portion of it represents persons who have emigrated during the decade. The number by which the emigrants exceed the immigrants of the decade will be (this calculation is sufficiently accurate for present purposes) the sum of the persons necessary to make good the death-rate since 1911 among the emigrants found in 1911, and of

The balance of migration.

the number of persons by which the balance of emigration over immigration found in 1921 exceeds that found in 1911.

Mr. Blunt estimated the balance of emigration in 1911 at a million. But I believe this to have been an over-estimate : it includes a conjecture of 150,000 emigrants to Nepal. I would put the balance at 900,000 at most. The proper average death-rate for these people, living under different conditions in different parts of the world, can only be guessed at : but it is unlikely to have exceeded 40 per mille per annum. The emigrants necessary to make this conjectured loss good would number 360,000. The present balance exceeds the balance of 1911 by 100,000. The number therefore by which emigrants during the decade have exceeded immigrants during the decade is 460,000, or say half a million.

This number is unlikely to exceed appreciably the number of births which escaped registration during the decade. In Chapter I it was assumed that these two numbers cancel each other. The assumption, which postulates an omission in registration of $2\frac{1}{2}$ per cent. of births (the amount of omission actually found by inspecting officers) is unlikely to have been wide of the mark.

The balance of migration in the Natural Divisions.

Natural Division.	Immigrants (000's omitted).	Emigrants (000's omitted).	Excess (+) or defect (-) of immigrants (000's omitted).
Himalaya West	126	88	+ 88
Sub-Himalaya West	282	264	- 32
Western Plain	892	586	- 144
Central Plain	912	554	- 242
Central India Plateau	139	208	- 69
East Satpuras	63	74	- 11
Sub-Himalaya East	120	178	- 58
Eastern Plain	115	491	- 376

calls for little comment except where it has altered appreciably since 1911. It was very fully dealt with in the last report. Himalaya West alone shows an excess of immigrants. On the one hand hillmen leave their homes very little : on the other, Dehra Dun and the hill stations are full of European and Gurkha settlers and soldiery, while there are many settlers from Rohilkhand in the Naini Tal Tarai.

Sub-Himalaya West shows a small excess of emigrants. Ten years ago there was a trifling balance in favour of immigrants, but in 1911 there were special reasons why this should be so—a fair in Saharanpur, and a concentration of labour on the Jumna bridge, then in process of building.

The Western Plain has a larger turnover of migration than any other division ; both immigrants and emigrants are fewer now than in 1911, but especially the former. The great bulk of this migration is between this and neighbouring tracts, and is connected with marriage. The division is also the main recruiting ground of the province for the army.

There is also a big turnover in the Central Plain, where the balance stands practically as it stood at last census. Both immigrants and emigrants are fewer, but this is due to the heavy mortality of the last few years. The nature of the migration has already been touched upon : apart from movement connected with marriage, the cities of Cawnpore and Lucknow import labour, while Oudh sends coolies to Dehra Dun, Bengal, and Assam and furnishes a large number of recruits to the army.

In the Plateau immigration and emigration balanced almost exactly in 1911. There is now a considerable excess of emigrants. The nature of movement is as before : the change in the balance is due to the unhealthy period through which Bundelkhand has passed since 1918.

In East Satpuras migration is nearly balanced. There is a periodic exodus in the autumn from North Mirzapur to Bengal of labour connected with the jute industry. The labourers usually return in April after the date of the census.

Sub-Himalaya East shows a small excess of emigration : which is really greater than is shown, for most of the overseas emigration of the province, which is not included in the figures, comes from this division. I have already expressed doubts as to the stream of emigrants, alleged in 1911, from this tract into Nepal.

The Eastern Plain has suffered a net loss by emigration far greater than that of any other division ; and this and the Central Plain bear between them nearly the whole of the real losses of the province. The loss, which goes almost entirely to Bengal and Assam, does not appear to be so great as

at last census. But for this appearance the heavy mortality of the decade may be answerable.

10. In the margin is shown the proportion per thousand of the residents

The birth-place of residents in cities.

City.	Born in district.	Born in adjacent districts or states.	Born elsewhere
Agra	882	58	60
Allahabad	733	71	196
Amroha	968	17	15
Bareilly	871	41	88
Benares	860	55	85
Budaun	922	45	33
Cawnpore	575	242	183
Etawah	772	117	111
Farrukhabad	851	68	81
Fyzabad	782	87	131
Gorakhpur	863	50	87
Hathras	586	111	303
Jaunpur	916	63	21
Jhansi	767	90	141
Koil	770	47	183
Lucknow	771	135	14
Meerut	790	60	150
Mirzapur	936	39	25
Moradabad	894	56	10
Muttra	917	23	55
Rampur	947	23	30
Saharanpur	895	57	108
Sambhal	976	13	11
Shahjahanpur	893	47	60

of each city that is home and foreign-born. As would be expected, the city with the largest number of immigrants is Cawnpore.* The very large proportion of immigrants from non-adjacent districts found in Hathras is not easily intelligible, especially as the figures of 1911 in no way correspond. These immigrants are almost wholly males, and must clearly be labourers. On the other hand, the very large decrease since 1911 of immigrants in Lucknow would not have been expected. These statistics show how very fluctuating in its constitution is the population of the cities, and bear out a statement made earlier in this chapter, that the male migration of this province is seldom permanent, but when it is not merely temporary and therefore not true migration at all, is almost always semi-permanent or periodic. The variation in the figures of the sacred cities, Allahabad, Benares and Muttra, is in no way surprising, but is due merely to the accidents of pilgrimage.

* Of the 575 shown as home-born residents of Cawnpore city, 52 are immigrants from the rural parts of the district. The corresponding figure for Lucknow is 61 (out of 771).

Subsidiary Table I.—Immigration (actual figures).

District and natural division where enumerated.	Born in—('000s omitted).																	
	District (or natural division).			Contiguous district or state in province.			Other parts of province.			Contiguous parts of other provinces and states.			Non-contigu- ous parts of other provin- ces, etc.			Outside India.		
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
1.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
United Provinces ..	46,030	24,162	21,868	..	..	..	..	..	..	241	16	185	185	95	90	55	37	19
British Districts ..	44,847	23,562	21,285	52	21	31	..	..	..	239	75	164	183	93	90	55	37	18
Himalaya, West ..	1,699	860	839	69	41	28	18	15	8	..	..	..	19	14	4	20	14	6
Dehra Dun ..	152	85	67	16	11	5	25	18	7	..	..	..	15	9	4	7	5	2
Naini Tal ..	169	93	76	81	49	32	17	11	6	..	..	..	3	3	..	7	6	1
Almora ..	521	261	260	4	1	3	1	1	..	..	..	..	..	..	..	4	2	2
Garhwal ..	474	225	248	8	5	3	1	1	..	..	..	..	1	1	..	2	1	1
Tehri State ..	514	154	160	3	1	2	..	..	..	..	..	..	2	1	..	..	..	..
Sub-Himalaya, West ..	4,258	2,306	1,952	183	72	111	22	14	9	6	2	4	18	10	7	3	8	..
Saharanpur ..	885	498	392	24	8	16	14	7	7	6	2	4	8	5	3	1	1	..
Bareilly ..	934	514	419	61	19	42	15	9	6	..	..	..	4	2	2	1	1	..
Bijnor ..	717	381	335	18	6	13	4	2	2	..	..	..	1	1	1	..	..	..
Pilibhit ..	382	210	172	44	16	28	5	3	2	..	..	..	1	..	..	..	..	..
Kheri ..	849	452	397	52	24	28	9	6	3	..	..	..	3	2	1	1	1	..
Rampur State ..	412	227	185	39	14	25	2	1	1	..	..	..	1	..	..	..	..	..
Indo-Gangetic Plain, West ..	11,753	6,419	5,304	213	62	151	33	17	16	88	26	62	53	27	26	5	5	1
Muzaffarnagar ..	721	415	306	61	15	46	4	2	2	5	1	4	3	2	1	..	..	..
Moorut ..	1,372	768	605	79	19	60	20	11	9	13	3	10	12	7	5	3	3	1
Bulandshahr ..	974	544	431	73	14	59	8	2	5	9	2	7	2	1	1	..	..	..
Aligarh ..	959	546	413	83	22	61	15	5	10	1	..	1	4	2	2	..	..	..
Muttra ..	543	319	224	45	10	35	9	4	5	11	4	7	11	4	7	1	1	..
Agra ..	822	474	348	42	11	31	15	7	7	9	2	7	35	13	22	1	1	..
Mainpuri ..	680	394	286	58	14	44	7	3	4	..	..	..	3	2	2	..	..	..
Etah ..	738	422	316	74	21	53	16	5	11	..	..	..	2	1	1	..	..	..
Budaun ..	897	508	389	72	17	55	5	2	3	..	..	..	1	1	1	..	..	..
Moradabad ..	1,128	615	513	56	17	39	13	6	7	..	..	..	2	1	1	..	..	..
Shahjahanpur ..	766	428	337	67	21	46	6	3	3	..	..	..	1	1	..	..	..	..
Farrukhabad ..	766	443	322	83	22	62	6	3	3	..	..	..	2	1	1	..	..	..
Etawah ..	663	382	281	50	14	36	7	3	4	11	4	8	2	1	..	..	..	..
Indo-Gangetic Plain, Central ..	11,005	6,078	5,527	220	72	148	43	23	20	..	..	..	41	25	15	8	8	2
Cawnpore ..	1,007	560	448	68	32	36	60	36	24	..	..	..	12	8	4	2	2	..
Fatehpur ..	605	326	279	43	13	29	4	2	2	..	..	..	1	1	1	..	..	..
Allahabad ..	1,344	694	650	27	9	19	19	10	9	..	..	..	11	7	4	2	2	1
Lucknow ..	621	343	279	65	26	39	26	16	11	..	..	..	8	5	3	3	3	1
Unao ..	781	422	359	33	9	24	4	2	2	..	..	..	1	..	..	..	..	..
Rae Bareilly ..	889	464	426	40	8	32	5	2	8	..	..	..	2	1	1	..	..	..
Sitapur ..	1,027	559	468	48	15	33	13	7	6	..	..	..	1	1	..	..	..	..
Hardoi ..	1,030	570	459	32	9	23	22	6	16	..	..	..	..	..	..	..	..	..
Fyzabad ..	1,111	571	540	48	11	37	10	4	6	..	..	..	2	2	1	1	1	..
Sultanpur ..	944	482	462	49	7	42	10	5	5	..	..	..	1	..	..	..	..	..
Partabgarh ..	800	408	392	51	7	43	3	1	2	..	..	..	1	..	1	..	..	..
Bara Banki ..	982	523	459	44	12	32	4	2	2	..	..	..	1	..	..	..	..	..
Central India Plateau ..	1,929	1,019	910	23	8	15	11	5	6	85	29	55	19	5	14	1	1	..
Jhansi ..	538	292	246	7	2	5	6	3	3	42	12	30	11	5	6	1	1	..
Jalaun ..	364	200	164	23	7	16	3	1	2	9	3	6	6	2	4	..	..	..
Hamirpur ..	394	213	181	27	4	22	5	8	2	8	2	6	6	2	4	..	..	..
Banda ..	572	300	272	17	5	12	4	2	2	15	4	10	8	8	3	..	..	..
East Satpuras ..	1,024	524	500	43	11	32	6	2	4	9	3	6	5	3	2	..	..	..
Mirzapur ..	682	348	334	27	6	21	3	1	1	8	3	5	5	3	2	..	..	..
Benares State ..	335	174	159	24	6	18	4	1	3	1	..	1	..	..	..	..	..	..
Sub-Himalaya, East ..	7,609	3,909	3,701	49	17	32	19	8	11	26	4	22	11	8	8	15	5	10
Gorakhpur ..	3,178	1,627	1,551	41	15	26	10	5	5	26	4	22	7	5	1	5	2	3
Basti ..	1,861	969	892	48	11	37	9	2	7	..	..	..	1	1	1	6	2	4
Gonda ..	1,401	729	672	61	20	41	9	3	6	..	..	..	2	1	1	1	1	..
Bahraich ..	1,015	534	481	39	15	24	7	4	3	..	..	..	1	1	..	3	1	2
Indo-Gangetic Plain, East ..	5,134	2,631	2,503	59	14	45	9	6	8	22	5	17	24	8	16	1	1	..
Benares ..	838	436	402	36	11	25	10	6	4	6	2	5	11	6	4	1	1	..
Jaunpur ..	1,096	565	530	38	6	32	21	3	18	..	..	..	1	..	1	..	..	..
Ghazipur ..	783	415	368	33	6	27	5	2	3	5	1	4	7	1	6	..	..	..
Ballia ..	798	420	378	16	3	12	4	1	3	10	2	8	4	1	4	..	..	..
Azamgarh ..	1,470	767	708	54	8	46	3	1	2	..	..	..	1	1	1	..	..	..

Subsidiary Table II.—*Emigration (actual figures).*

District and natural division where born.	Enumerated in ('000s omitted).														
	District (or natural division).			Contiguous district or state in province.			Other parts of province.			Contiguous parts of other provinces and states.			Non-contiguous parts of other provinces, etc.		
	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
United Provinces ..	46,030	24,162	21,868	..	..	..	..	..	..	576	228	348	825	623	202
British Districts ..	44,847	23,562	21,285	72	24	48	..	..	..	576	228	348	819	619	200
<i>Himalaya, West</i> ..	1,647	860	839	16	8	8	3	2	1	..	..	..	19	16	3
Dehra Dun ..	152	85	67	2	1	1	2	1	1	..	..	..	4	2	2
Naini Tal ..	169	93	76	9	3	6	5	3	2	..	..	..	1	1	0
Almora ..	521	261	260	46	27	19	4	3	..	..	..	..	4	3	1
Garhwal ..	474	225	248	12	8	4	5	3	..	..	..	..	9	8	1
Tehri State ..	314	154	160	6	1	2	..	..	..	..	..	..	1	1	0
<i>Sub-Himalaya, West</i> ..	4,258	2,306	1,952	198	75	123	18	11	..	14	6	8	34	23	11
Saharanpur ..	885	493	392	28	12	16	5	3	2	13	5	8	14	9	5
Bareilly ..	933	514	419	74	35	49	16	8	8	..	..	..	10	7	3
Bijnor ..	717	381	335	37	17	20	10	6	4	..	..	..	7	5	2
Pilibhit ..	382	210	172	40	14	26	2	1	1	..	..	..	..	..	..
Kheri ..	849	452	397	38	12	26	4	2	2	..	..	..	..	..	..
Rampur State ..	412	227	185	39	15	24	5	2	3	..	..	..	4	3	1
<i>Indo-Gangetic Plain, West</i> ..	11,753	6,119	5,304	206	81	122	38	23	15	163	61	100	129	87	42
Muzaffarnagar ..	721	415	306	47	13	34	3	2	1	9	3	6	8	5	3
Meerut ..	1,372	768	605	60	13	47	14	7	7	25	10	15	20	12	8
Bulandshahr ..	974	541	431	65	16	49	9	5	1	22	5	14	12	8	4
Aligarh ..	959	540	413	74	20	54	32	10	22	5	1	4	23	15	8
Muttra ..	543	319	224	40	11	29	10	4	6	15	1	11	27	12	15
Agra ..	822	471	348	28	8	20	28	11	17	29	10	19	56	36	20
Mainpuri ..	680	391	286	64	17	47	6	3	3	..	..	..	4	2	2
Etah ..	733	422	316	17	22	55	8	3	5	..	..	..	3	2	1
Budaun ..	897	508	389	28	26	62	10	5	5	..	..	..	3	2	1
Moradabad ..	1,123	615	511	81	29	52	15	7	8	..	..	..	12	8	4
Shahjahanpur ..	766	418	337	84	27	57	13	6	7	..	..	..	3	2	1
Farrukhabad ..	766	441	322	65	18	47	10	5	5	..	..	..	8	5	3
Etawah ..	663	382	281	31	11	20	14	2	12	6	2	1	3	2	1
<i>Indo-Gangetic Plain, Central</i> ..	11,605	6,074	5,327	218	64	150	42	21	22	5	2	1	289	212	77
Cawnpore ..	1,007	560	448	53	11	39	14	6	8	..	..	..	34	21	13
Patehpur ..	605	326	279	27	9	18	5	3	2	..	..	..	14	9	5
Allahabad ..	1,344	694	650	42	9	33	17	9	8	5	2	3	54	37	17
Lucknow ..	621	343	279	38	10	28	15	11	4	..	..	..	25	17	8
Unao ..	781	422	359	58	23	35	7	3	4	..	..	..	10	7	3
Rae Bareilly ..	889	464	426	37	11	26	15	8	7	..	..	..	28	21	7
Sitapur ..	1,027	569	458	59	24	35	7	4	3	..	..	..	2	1	1
Hardoi ..	1,050	570	480	79	26	53	8	4	4	..	..	..	2	1	1
Fyzabad ..	1,111	571	540	50	10	40	13	7	6	..	..	..	42	34	8
Sultanpur ..	944	482	462	45	8	37	16	7	9	..	..	..	35	30	5
Partabgarh ..	800	408	392	32	7	25	17	7	10	..	..	..	35	28	7
Bara Banki ..	982	523	459	57	20	37	10	6	4	..	..	..	7	6	1
<i>Central India Plateau</i> ..	1,928	1,019	910	48	17	31	6	3	3	103	37	66	51	22	29
Jhansi ..	538	292	246	22	3	19	6	3	3	58	22	36	21	9	12
Jalaun ..	364	200	164	16	6	10	2	1	1	8	2	6	5	2	3
Hamirpur ..	394	213	181	34	10	24	1	1	0	19	6	13	16	6	10
Banda ..	572	300	272	27	8	19	6	2	4	9	3	6	18	9	9
<i>East Satpuras</i> ..	1,024	524	500	22	3	17	6	3	3	11	1	7	35	25	10
Mirzapur ..	682	348	334	25	6	19	9	4	5	11	4	7	34	24	10
Benares State ..	333	174	159	2	..	2	..	..	..	..	..	..	1	1	0
<i>Sub-Himalaya, East</i> ..	7,609	3,909	3,701	34	12	22	24	13	11	38	13	25	82	63	19
Gorakhpur ..	3,178	1,627	1,551	35	8	27	10	4	6	38	13	25	48	38	10
Basti ..	1,861	969	892	76	28	48	5	2	3	..	..	..	19	12	7
Gonda ..	1,401	729	672	49	16	33	12	7	5	..	..	..	14	12	2
Bahraich ..	1,015	534	481	20	6	14	4	2	2	..	..	..	1	1	0
<i>Indo-Gangetic Plain, East</i> ..	5,134	2,631	2,503	116	24	92	22	12	10	23	7	16	324	226	98
Benares ..	838	436	402	51	10	41	12	4	8	5	1	2	54	37	17
Jaunpur ..	1,096	565	530	75	10	63	14	6	8	..	..	..	52	41	11
Ghazipur ..	783	415	368	29	6	23	8	3	5	8	2	6	72	47	25
Ballia ..	798	420	378	19	3	16	3	2	1	10	3	7	75	50	25
Azamgarh ..	1,470	767	703	66	12	54	15	7	6	..	..	..	75	53	20

NOTE.—The apparent discrepancy occasionally occurring in cross totals is due to the totals of males, females, and persons having been abbreviated independently to the nearest thousand.

Subsidiary Table III.—*Migration between natural divisions (actual figures)
compared with 1911.*

Natural division in which born.	Number enumerated (thousands omitted).							
	Himalaya, West.	Sub-Himalaya, West.	Indo-Gangetic Plain, West.	Indo-Gangetic Plain, Central.	Central India Plateau.	East Satpuras.	Sub-Himalaya, East.	Indo-Gangetic Plain, East.
1	2	3	4	5	6	7	8	9
Himalaya, West ..	1921	1,699	51	27	8	..	1	1
	1911	1,382	46	30	9	..	2	1
Sub-Himalaya, West ..	1921	12	4,258	141	44	1	5	2
	1911	11	4,012	169	76	1	8	3
Indo-Gangetic Plain, West	1921	6	133	11,753	90	7	2	3
	1911	9	154	12,348	116	11	3	6
Indo-Gangetic Plain, Central.	1921	2	29	62	11,605	45	35	75
	1911	2	29	84	12,014	52	48	102
Central India Plateau ..	1921	..	1	8	22	1,029	..	1
	1911	..	1	11	35	2,008	1	1
East Satpuras ..	1921	..	..	15	..	1,024	..	33
	1911	..	..	17	..	1,006	..	30
Sub-Himalaya, East ..	1921	..	3	2	47	..	7,609	17
	1911	1	7	2	68	..	7,302	31
Indo Gangetic Plain, East	1921	..	..	2	32	17	15	5,134
	1911	..	1	3	41	32	15	5,082

NOTE.—The figures for Himalaya, West, include in 1921, 316,746 persons of Tehri State, and the figures of Sub-Himalaya, West, 452,957 of Rampur State, both excluded in the 1911 figures.

Subsidiary Table IV.—*Migration between the United Provinces and other parts of India.*

Province (or State,)	Immigrants from other Provinces and States found in the United Provinces.			Emigrants from United Provinces found in other provinces and States.			Excess (+) or deficiency (-) of Immigration over emigration.	
	1921.	1911.	Variation.	1921.	1911.	Variation.	1921.	1911.

Part I.—(Migration to and from the United Provinces.)

Ajmer-Merwara	1,729	2,417	—688	18,097	12,115	+5,982	—16,868	—3,046
Andamans	33	154	—121	3,126	3,200	—74	—3,093	—3,007
Assam	712	1,086	—374	70,796	98,411	—27,615	—78,084	—97,825
Baluchistan	365	567	—202	12,260	5,987	+6,273	—11,895	—5,420
Bengal	18,606	25,700	—7,094	338,442	400,956	—62,514	—319,836	—375,256
Bihar and Orissa	77,692	105,913	—27,921	115,794	122,164	—6,370	—38,102	—17,151
Bombay (including Aden)	6,781	8,818	—2,037	112,496	89,521	+22,975	—106,715	—80,703
Burma	1,880	732	+1,148	68,592	51,253	+17,339	—67,212	—50,521
Central Provinces and Berar	8,560	14,583	—6,023	94,029	131,567	—37,538	—85,469	—116,984
Coorg	30	1	+29	8	16	—8	+22	—15
Delhi	14,914	32,404	—17,490	74,814	57,202	+17,612	—69,900	—24,798
Madras	2,217	2,260	—43	2,339	2,098	+241	—122	+162
North-West Frontier Province	1,890	1,948	—58	8,902	5,064	+3,838	—2,012	—3,116
Punjab	79,269	83,928	—4,659	174,168	144,169	+29,999	—94,899	—60,241
Total, British Provinces in India	214,178	279,611	—65,433	1,094,863	1,123,723	—28,860	—880,686	—844,112
Assam States	192	174	+18	352	..	+252	—60	+174
Baluchistan Agencies .. ..	..	..	..	57	..	+57	—57	..
Baroda	183	302	—119	3,931	3,898	+34	—3,749	—3,596
Bengal States	28	81	—53	4,653	4,658	—5	—4,625	—4,577
Bihar and Orissa States	1	68	—67	971	1,702	—731	—970	—1,634
Bombay States	782	514	+268	2,533	4,764	—2,231	—1,751	—4,250
Burma States .. ..	..	..	..	2,276	..	+2,276	..	..
Central India Agency	82,531	121,073	—38,542	135,924	128,088	+7,836	—53,393	—7,015
Central Provinces States	2,553	240	+2,313	7,865	..	+7,865	—5,312	+240
Gwalior	47,600	74,869	—27,269	58,966	40,456	+18,510	—11,866	+34,413
Hyderabad	1,736	1,849	—113	6,443	10,617	—4,174	—4,707	—3,268
Kashmir	1,404	1,966	—562	557	981	—424	+847	+976
Madras States	8	99	—91	51	59	—8	—43	+40
Mysore	413	416	—3	585	909	—324	—172	—493
North-West Frontier Province Agencies	3	1	+2	3,782	..	+3,782	—3,779	+1
Punjab States	4,900	5,980	—1,080	19,987	18,542	+1,445	—15,087	—12,592
Rajputana Agency	68,112	103,024	—34,912	56,587	70,057	—13,470	+11,525	+32,967
Sikkim	1	7	—6	..	98	—98	+1	—91
French and Portuguese settlements	197	336	—139	..	..	..	+197	+336
Total, States in India	210,644	310,489	—99,845	305,421	284,829	+20,592	—94,777	+25,660
India unspecified	330	322	+8	..	..	..	+330	+322
Total, all India	425,152	590,422	—165,270	1,400,284	1,408,552	—8,268	—975,132	—818,130

Part II.—(Migration to and from British districts of the United Provinces.)

Ajmer-Merwara	1,726	2,415	—689	17,710	11,981	+5,729	—15,984	—9,566
Andamans	33	154	—121	3,115	3,161	—46	—3,082	—3,007
Assam	605	1,032	—427	76,730	97,944	—21,214	—76,125	—90,912
Baluchistan	361	566	—205	12,230	5,970	+6,260	—11,869	—5,404
Bengal	18,451	25,540	—7,089	338,184	399,593	—61,409	—319,783	—374,053
Bihar and Orissa	70,881	104,993	—34,112	115,588	122,099	—6,511	—99,207	—17,106
Bombay (including Aden)	6,749	8,776	—2,027	112,236	89,521	+22,715	—105,477	—80,745
Burma	1,861	722	+1,139	68,493	50,565	+17,928	—67,132	—49,843
Central Provinces and Berar	8,519	14,558	—6,039	93,342	130,790	—37,448	—84,828	—116,241
Coorg	30	1	+29	8	19	—9	+22	—15
Delhi	14,843	32,267	—17,424	73,870	56,679	+17,191	—69,027	—24,412
Madras	2,214	2,256	—42	2,339	2,098	+241	—125	+158
North-West Frontier Province	1,868	1,895	—27	3,902	5,085	—1,183	—2,034	—3,140
Punjab	77,761	83,435	—5,674	173,167	143,736	+29,431	—95,406	—60,301
Total, British Provinces in India	210,902	278,610	—67,708	1,090,904	1,119,197	—28,293	—880,002	—840,587
Assam States	192	170	+22	252	..	+252	—60	+170
Baluchistan Agencies .. ..	..	..	..	57	..	+57	—57	..
Baroda	183	298	—115	3,879	3,890	—11	—3,695	—3,592
Bengal States	28	81	—53	4,617	4,640	—23	—4,589	—4,559
Bihar and Orissa States	1	68	—67	961	1,700	—739	—930	—1,032
Bombay States	782	506	+276	2,528	4,764	—2,236	—1,746	—4,258
Burma States .. ..	..	..	..	2,274	..	+2,274	—2,274	..
Central India Agency	82,415	120,995	—38,580	135,100	128,088	+7,012	—52,685	—7,093
Central Provinces States	2,553	240	+2,313	7,826	..	+7,826	—5,273	+240
Gwalior	47,582	74,820	—27,238	58,963	40,456	+18,507	—11,381	+34,364
Hyderabad	1,696	1,842	—146	6,362	10,616	—4,254	—4,666	—3,174
Kashmir	1,365	1,937	—572	551	973	—422	+814	+964
Madras States	5	99	—94	51	59	—8	—48	+40
Mysore	411	414	—3	585	908	—323	—174	—494
North-West Frontier Province Agencies	3	1	+2	3,782	..	+3,782	—3,779	+1
Punjab States	4,877	5,803	—926	19,522	17,975	+1,547	—14,645	—12,172
Rajputana Agency	67,980	102,939	—34,959	56,046	69,451	—13,405	+11,934	+33,478
Sikkim	1	7	—6	..	98	—98	+1	—91

Subsidiary Table IV—*Migration between the United Provinces and other parts of India—*
(concluded).

Province (or State).	Immigrants from other Provinces and states found in the United Provinces			Emigrants from United Provinces found in other Provinces and States.			Excess (+) or deficiency () of immigration over emigration	
	1921.	1911.	Variation.	1921.	1911.	Variation.	1921.	1911.
<i>Total States in India</i> ..	262,271	375,837	- 113,566	374,969	347,144	+ 27,825	-112,698	+ 28,693
India unspecified ..	330	319	+ 11	..	..	..	+ 890	+ 819
<i>Total, all India</i> ..	473,503	654,766	- 181,263	1,465,873	1,466,341	- 468	-992,370	-811,576
Part III.—(Migration to and from states of United Provinces)								
Ajmer-Merwara ..	3	2	+ 1	387	134	+ 253	884	-132
Andamans ..	..	..	..	11	39	- 28	-11	-89
Assam ..	107	54	+ 53	63	467	401	+ 41	- 418
Baluchistan ..	4	1	+ 3	30	17	+ 13	- 26	- 16
Bengal ..	155	160	- 5	258	1,363	-1,105	-103	-1,203
Bihar and Orissa ..	1,311	20	+ 1,291	206	65	+ 141	+ 1,105	- 45
Bombay (including Aden) ..	32	42	- 10	270	..	+ 270	- 238	+ 42
Burma ..	19	10	+ 9	99	688	- 589	- 80	- 678
Central Provinces and Berar ..	41	25	+ 16	687	768	- 81	- 646	- 743
Coorg ..	..	..	..	..	..	..	..	..
Dolhi ..	71	137	- 66	944	523	+ 421	- 873	- 886
Madras ..	3	4	- 1	..	..	..	+ 8	+ 4
North-West Frontier Province ..	22	53	- 31	..	29	- 29	+ 22	+ 24
Punjab ..	1,508	493	+ 1,015	1,001	433	+ 568	+ 507	+ 40
United Provinces (British districts) ..	71,613	63,626	+ 7,987	52,000	65,791	- 13,791	+ 19,613	- 2,165
<i>Total, British Provinces in India</i> ..	74,889	64,627	+ 10,262	55,959	70,317	- 14,358	+ 18,930	- 5,690
Assam States ..	..	4	- 4	..	..	..	..	+ 4
Baroda ..	..	4	- 4	53	8	+ 45	- 53	- 4
Bengal States ..	..	..	..	38	18	+ 18	- 36	- 18
Bihar and Orissa States ..	..	..	..	10	2	+ 8	- 10	- 2
Bombay States ..	..	8	- 8	5	..	+ 5	- 5	+ 8
Burma States ..	..	..	..	2	..	+ 2	- 2	..
Central India Agency ..	116	78	+ 38	824	..	+ 824	- 708	+ 78
Central Provinces States ..	..	..	..	39	..	+ 39	- 39	..
Gwalior ..	18	49	- 31	3	101	+ 3	+ 15	+ 49
Hyderabad ..	40	7	+ 33	81	8	- 20	- 41	- 94
Kashmir ..	30	10	+ 20	6	..	- 2	+ 33	+ 11
Madras States ..	3	..	+ 3	..	1	..	+ 3	..
Mysore ..	2	2	..	..	..	- 1	+ 2	+ 1
North-West Frontier Province Agencies ..	..	..	..	..	..	..	..	..
Punjab States ..	23	177	- 154	465	567	- 102	- 442	- 390
Rajputana Agency ..	132	95	+ 37	541	606	- 65	- 409	- 511
Sikkim ..	..	..	..	..	..	..	..	..
French and Portuguese settlements ..	..	..	..	..	..	..	..	..
<i>Total, States in India</i> ..	373	443	- 70	2,065	1,311	+ 754	1,692	- 868
India unspecified ..	0	3	- 3	..	..	..	..	+ 3
<i>Total, all India</i> ..	75,262	65,073	+ 10,189	58,024	71,628	- 13,604	+ 17,238	- 6,555

Subsidiary Table V.—*Showing number of emigrants that sailed from Calcutta to various British colonies between 1911 and 1917, (after which indentured emigration ceased).*

District.	Number.	District.	Number.	District.	Number.
<i>Total</i> ..	41,248	Aligarh ..	267	<i>Central India Plateau</i> ..	..
<i>Himalaya, West</i> ..	..	Muttra ..	209	Jhansi ..	..
Dehra Dun ..	..	Agra ..	642	Jalaun ..	..
Naini Tal ..	..	Mainpuri ..	207	Hamirpur ..	..
Almora ..	..	Etah ..	119	Banda ..	..
Garhwal ..	..	Budaun ..	224	..	..
<i>Sub-Himalaya, West</i> ..	783	Moradabad ..	218	<i>East Satpuras</i> ..	258
Baharanpur ..	344	Shahjahanpur ..	63	Mirzapur ..	258
Bareilly ..	333	Farrukhabad ..	493	..	..
Bijnor ..	..	Etawah ..	440	<i>Sub-Himalaya, East</i> ..	15,424
Philibhit ..	..	<i>Indo-Gangetic Plain, Central</i> ..	12,807	Gorakhpur ..	1,357
Kheri ..	56	Cawnpore ..	744	Basti ..	7,467
<i>Indo-Gangetic Plain, West</i> ..	4,026	Fatehpur ..	563	Gonda ..	4,521
Muzaffarnagar ..	132	Allahabad ..	1,282	Bahraich ..	1,579
Meerut ..	590	Lucknow ..	872	<i>Indo-Gangetic Plain, East</i> ..	2,245
Bulandshahr ..	372	Unao ..	881	Banarès ..	354
..	..	Rae Bareilly ..	1,753	Jaunpur ..	701
..	..	Sitapur ..	765	Ghazipur ..	292
..	..	Hardoi ..	461	Ballia ..	153
..	..	Fyzabad ..	1,395	Asamgarh ..	745
..	..	Sultanpur ..	1,446	<i>Unspecified districts</i> ..	5,755
..	..	Partabgarh ..	992	..	..
..	..	Bara Banki ..	1,153	..	..

Chapter IV.—RELIGION.

Imperial Table VI gives the figures for all the religions returned for each district and state. Tables XV and XVI show certain details regarding Christian sects.

The general distribution of the population by religion as compared with that of 1911 is shown in the margin. The proportions per 10,000 of population are—

Religion.	Number in 1921.	1911.	
I.—Indo-Aryan religions—			Brahmanic Hindus ... 8,448
(1) Hindu—			Muhammadans ... 1,446
(a) Brahmanic	89,292,926	40,705,353	Other Religions ... 106
(b) Arya	205,570	131,638	In 1911 these were 8,478, 1,438,
(c) Brahmo	183	41	and 84 respectively. Both relatively
(2) Jain ..	68,111	75,735	and absolutely Hindus have lost;
(3) Sikh ..	14,206	15,186	Muhammadans stand much where
(4) Buddhist	488	700	they were, and "Other Religions" have
II.—Muhammadan	6,744,967	6,904,781	gained. Owing to their great numerical
III.—Christian ..	2,817,9	179,679	preponderance the relative loss of
IV.—Parsi ..	925	872	Hindus appears inconsiderable. Their
V.—Jew ..	41	50	absolute loss however amounts to
VI.—Indefinite beliefs	12		1,412,427 out of the Province's total

The general distribution of the population by religion.

loss of population of 1,503,412. Put in another way, out of every 10,000 persons found, on a balance being struck of all causes affecting the population during the decade, to be lost to the Province, Brahmanic Hindus have lost 9,395, or 917 (i.e., about 9 per cent.) more than their proper share. I will discuss possible explanations of this disproportion in a later paragraph: I mention it here as being the outstanding revelation of Table VI.

2. The classification adopted is the same as that of last census and has been prescribed for the whole of India.* And the returns include precisely what they did in 1911. As regards these returns there are no doubtful cases in this Province. Such well-defined religions as Islam and Christianity admit of none. Hinduism might admit of many: but in practice it does not. The cult of the depressed classes in the Himalayas, and of certain tribes in the Plateau and the Satpuras, is in essence animistic, and has only become Hinduised by merger and imitation. There are also scattered over the Province numerous castes—the Chamar is a well-known instance—whose conformity to Hindu social practices is far from complete. On a strict definition of Hinduism, whether regarded as a religion or as a social system—as to this later—it might be arguable whether these tribes and castes are Hindus or not. But for the purpose of these returns a strict definition is out of place—and if not out of place, it would be impracticable. The members of these tribes and castes when asked their religion had no doubt that they were Hindus. Their neighbours in general, and the enumerator in particular, had no doubt that they were Hindus. Beyond this it would be absurd—if it were possible—to go. Nor was any attempt to go beyond this made in 1911. The figures of Table VI are therefore exactly comparable to those of last census.

The meaning of the figures.

With the proviso here indicated, that the figures for Hindus include large numbers who from certain points of view might be held not to be Hindus at all, there is no reason to doubt the accuracy of Table VI: except in respect of Christians, whose numbers are undoubtedly understated, as I shall show in the paragraph devoted to that religion.

3. The local distribution of religions has been fully dealt with in previous reports and little remains to be said about it. Brahmanic Hindus vastly

The local distribution of religions.

* It is therefore out of place for me to discuss it. I say this because in one respect I may be thought to take sides in a controversial matter. The Aryas have been shown as a sub-division of Hindus. Many, including perhaps a majority of the Aryas themselves, would hold this to be incorrect. The question was very fully discussed by Mr. Blunt in 1911, and I have no desire to touch upon it. I would only say that so far as I can ascertain the question remains where it was ten years ago.

predominate everywhere. Only in the Rampur State are they challenged numerically by Muhammadans, who there number 214,000 against 236,000 Hindus. In the adjoining district of Moradabad also Muhammadans are a powerful minority of 436,000 out of a population of 1,198,000. Elsewhere Hindus outnumber all other religions put together by multiples ordinarily varying between about 3 and 10, while in British Garhwal they claim just under and in Tehri Garhwal just over 99 per cent. of all the inhabitants.

The relative distribution as between Hindus and Muhammadans has remained unchanged in the main. The Muhammadans have indeed during the decade gained numerically on Hindus all over the Province. But with trifling exceptions they show absolute increases only where the population as a whole has increased absolutely—i.e., in Dehra Dun, Cawnpore, Gorakhpur, Basti, Gonda, and Bahraich; and elsewhere show decreases in common with Hindus. The only exceptions to this rule which call for mention occur in Sultanpur, Partabgarh, and Bara Banki, where in spite of a large decrease of population the Muhammadans have maintained or almost maintained their numbers. These exceptions readily admit of explanation. The rest of the Fyzabad division in which those districts lie has increased in population. The losses in these districts are largely due to emigration, for Bengal and Dehra Dun draw heavily on them for unskilled labour: and the labour so recruited is almost entirely Hindu.

As to Other Religions, all but Jains, Aryas, and Christians can be neglected. They are not indigenous to the Province, and their numbers merely reflect the accidents of trade (Parsi, Jew, and Buddhist), of military reliefs (Sikh), and of the posting of Government servants (Brahmo). The figures for Jains suggest no movement during the decade—nor would one expect any—but only a natural decrease suffered in common with the population generally. There remain Aryas and Christians.

These are the only proselytizing religions of the Province (for conversions to Islam are so unfrequent here as to be negligible). Both show large proportionate increases, which must be due in the main to conversions. In his report Mr. Blunt has remarked on the receptivity to new ideas of the west of the Province as compared with the east, and has suggested reasons for this. What he said has been borne out remarkably by the results of the present census. The increase in both religions is concentrated in the three western divisions (Meerut, Agra, and Rohilkhand), where Aryas are now 165,000 and Christians 161,000, out of respective totals of 205,000 and 203,000 for the whole Province. The case of the two most western districts of all, Meerut and Muzaffarnagar, is curious. During the decade in Meerut Aryas have increased from 11,797 to 24,078 and Christians from 18,142 to 31,120: in Muzaffarnagar Aryas have increased from 6,224 to 14,639, and Christians from 2,583 to 6,415. These increases, though not strictly proportionate, are at least parallel for both religions: and the two districts are evidently prepared to give impartial consideration to any innovation in religious ideas. The parallelism is observable, though nowhere so well marked, in most of the western districts: the exceptions being Bijnor, Saharanpur, and Moradabad, where according to the returns Christians have lost ground. The figures for Christians in these districts are however unreliable, as I shall show, and are undoubtedly understated.

In the following paragraphs the returns of each of the principal religions will be noticed separately.

The Hindus.
(i) *Definition of the Hindu community.*

4. For the purposes of this census (and of the last) the term Hindu includes, as I have already said, all who claim to be Hindus. As, so far as I know, no claim to Hindu status was contested, it includes at the same time all who are looked upon as Hindus by their neighbours, though this was not the test in filling up the schedule. In effect Hinduism has been treated not as a religion but as a social system. And that is what—if I may make a bald statement of opinion while refusing to be drawn into a discussion of this threadbare question—it truly is. To say so is not invidious. The description is also true of any old established "religions," though more obviously true of Hinduism than of others. There are thousands of Christians who have no particular religious beliefs but who conform to Christian customs; they are married in a church and buried by a parson. Because they conform to these customs—which are really social not religious—they look upon themselves, and are looked upon, as Christians as a matter of course. Before admitting their Christian status no one would think of questioning them on their attitude to the Bible.

To succeed it is necessary to know when to keep the eyes shut. The Hindu community is aware that its prosperity depends largely on its numbers. It is also aware that someone must skin its dead cattle, and that the Chamar is anxious to employ a Brahman, and will do so if he can find a sufficiently accommodating priest and a sufficiently large fee. And being aware of all this it does not ask awkward questions, but admits the Chamar. Similarly the Hindu does not stress the fact that the malignant sprite, to propitiate whom is the sole religious exercise of the Musahar, does not happen to find mention in the Hindu scriptures. The Musahar having no wish to be isolated, and being naturally attracted to the strong and more enlightened community that surrounds him, has in a primitive and partial way adopted Hindu social practices. He is accepted as a Hindu, and all parties are satisfied. In much the same way the gloomy animism of the Highland Scot is accepted without question as Christianity.

There should now be no doubt as to what is covered by the term "Hindu" as used in the census tables. The term includes all who conform in any degree to a certain social code. It will be obvious of course that it includes large numbers whose material interests differ from, and are even antagonistic to, those of the rest, and this fact ought to be borne in mind whenever the figures of Table VI are used for political or polemical purposes.

Hindus have decreased during the decade by 347 per 10,000, or just under 3·5 per cent. In the previous decade they decreased by 1·3 per cent. Their numbers are now only about three-quarters of a million greater than they were in 1881, in spite of their recorded increase of 6·1 per cent. in the decade following that year. Much of that recorded increase however was probably due to improved methods of enumeration. (ii) *Statistics of the Hindu community.*

Any causes other than the influenza epidemic for the decrease in this decade are, if they exist, completely obscured by the overwhelming nature of that calamity. The causes of decrease of the Hindus are the same as the causes of decrease of the population, with which for large purposes the Hindus are synonymous, and have been dealt with in Chapter I. The causes of the relative failure of the Hindus, vis-a-vis the other religious communities, to withstand the epidemic is a comparative matter and is dealt with in the concluding paragraph of this chapter.

5. Though there is considerable diversity throughout the Province in the religious and social practices of Muhammadans, there can never be any doubt as to who is a Muhammadan and who is not. Muhammadans have decreased by 261 per 10,000 or 2·6 per cent. In the previous decade they decreased by 1 per cent. On the other hand they are now by 582,000 more numerous than in 1881; that is to say their absolute increase in the last forty years is within measurable distance of that of the Hindus. If this is to be taken as the normal relative rate of increase of the two communities—and forty years should be a long enough period to equalise conditions affecting vitality—the Muhammadans will reach numerical equality with the Hindus in 1,185 years. I mention this calculation as the result of a pretty sum in algebra. It need not be taken seriously. Nor even if true is it important, for I understand it to be a rule of practical statecraft to assume the end of all things after thirty-six months.

The Muhammadans.

To attempt to estimate how far the figures for Muhammadans are the figures for a distinct race, as well as for a distinct religion is, it is to be feared, quite hopeless. Mr. Blunt discussed the question very fully in 1911, and concluded with a rough guess—in which he professed no sort of confidence—that the Saiyids, Mughals, Pathans, and three-fourths of the Shaikhs were Muhammadans, i.e., extra-Indian by origin, the rest being the descendants of local converts. I would only suggest that the grounds even of this conjecture are themselves highly conjectural. For the fact that certain Muhammadan communities practise Hindu customs is as likely to be due to Hindu environment as to Hindu extraction.

Be this as it may, there is no doubt that at the present-day conversions either to or from Islam are negligible, and that the decrease since 1911 is due to a surplus of deaths over births during the decade: migration also being a negligible factor.

6. Aryas have increased from 131,638 to 205,570 or by 56 per cent. The fact of their being concentrated in the west, and of the bulk of their increase occurring *The Aryas.*

there, has already been remarked upon. Of all the districts of the three western administrative divisions, in Budaun only have they failed to make progress, and in Pilibhit only have they retrogressed. And it is noteworthy that Pilibhit is the most easterly of these districts and Budaun is flanked on the east only by Shahjahanpur. They have advanced comparatively little in the Gorakhpur and have lost ground in the Benares division.

Elsewhere in individual districts there are very large percentages of increase in Fatehpur, Jalaun, and Naini Tal. In the two first named the actual numbers involved are too small to have any significance. In Naini Tal however the increase is due to a movement initiated during the decade which I happen myself to have witnessed. In about 1913 a deliberate and largely successful attempt was made in certain villages to proselytize the so-called "Doms," the depressed classes of the hills. This is a new departure for the Arya Samaj, which has hitherto found its converts mainly among the intellectuals of the higher castes, and at first sight looks like a leaf taken out of the book of the Christian Missionaries, who, as is well-known, devote themselves principally to the low castes and the outcastes. In fact however the Samaj has made a successful appeal to persons of a type other than that from which Christian converts are chiefly drawn. Christianity attracts the sweeper and the Chamar who see no hope of a position of respectability in the social organisation within whose pale, but only just within whose pale, they have been born, and therefore welcome inclusion in another. The Arya seed has germinated in a different soil. The hill "Doms," about whom more will be found in the chapter on caste, are largely artisans, and many of them by their industry and enterprise have become well-to-do and even men of substance. But they still find themselves looked down upon by the hill Brahman and Rajput. It is to men of this sort that the Samaj has appealed. They have sufficient intelligence to be able to assimilate its doctrines—which have not the simplicity of Christian teaching—and, since a predisposing worldly motive must be acknowledged, they see in Aryaism a path to social recognition among their Hindu neighbours. The Samaj therefore benefits by the vague but undoubted connection which it maintains with Hinduism, and finds proselytes among those who having risen in material prospects seek also to rise in their own social system. Christianity on the other hand appeals rather to such as having no material prospects to help them, see nothing to hope for from Hinduism and are ready to break with it altogether. The movement I have described as having been begun in Naini Tal still continues, and will undoubtedly have penetrated further into Kumaun by the end of the next decade.

There is no reason to suppose that the gains of the Samaj by conversion and net natural increase are set off by any but negligible losses. Isolated cases of the re-admission of an Arya into orthodox Hinduism are occasionally heard of, but so rarely that there appears at present to be no tendency in this direction. The survival rate of Aryas is probably higher for the decade than that of any other community. For being on the whole a well-to-do body, and living in reasonable comfort, they were in a better position than others to resist the influenza epidemic. This however is a mere surmise. There are no figures that can be used to support it. But I should be disposed to believe that the proportion of increase that is attributable to converts is not so large in the case of Aryaism as in the case of Christianity.

The view is sometimes expressed that the Samaj would advance more rapidly were it not that the greater laxity which now prevails in the matter of caste restrictions tends to retain in the ranks of orthodoxy persons who would otherwise have joined one of the more advanced communities. I can only say that I have often heard of this greater laxity but have never observed it. The matter is touched upon in the chapter on caste. It is true that the rate of increase of Aryas has fallen in the last three decades. But it has fallen in a regular geometrical progression (the rates being 196, 101, and 56), and nothing was heard, as far as I know, of greater laxity in the decade 1901–1911. The declining rate is natural, for a new force cannot be expected to maintain its original impetus.

Christians.

7. Christians, according to the census return, have increased from 179,694 to 203,179, or by 13 per cent. The true increase however is considerably greater than this. There is no doubt that a deliberate attempt was made—and successfully made—by members of the Samaj, the open enemy of Christianity in this

Province, to induce Christian converts from Hinduism to return their former religion. The numerical gain to Hinduism was of course not important, but the loss to the relatively minute Christian body was very large. I received complaints that this was going on at different times from many districts, but chiefly from Bijnor, Moradabad, Saharanpur, and Muzaffarnagar. District Census Officers no doubt did their best to prevent a false return, but where the enumerator was in sympathy with the falsification this was obviously difficult. After the census was finished and time had been given for any excitement connected with it to die down, I had five villages of Bijnor district, where complaints had been loudest, personally rechecked by the tahsildars. The villages selected were of course known to have some Christian inhabitants. As a result, in two villages no mistake was found: in one village five persons and in the other two (which adjoin each other) combined about eighty persons, who have been returned in the census as Hindus, told the tahsildar that they were really Christians. Most of these said that their religion had not been asked by the enumerator, who put down what he pleased. Others described various forms of pressure brought to bear upon them by Aryas to induce them to make a false return. According to those who complained to me originally, this pressure took the form of boycott.

This recheck is sufficient to prove that endeavours have been made to falsify the returns of Indian Christians; and they were almost certainly made throughout the Province, but especially in the west and probably nowhere so thoroughly as in Bijnor. In Bijnor the number of Christians recorded fell from 3,315 in 1911 to 1,652 in 1921. These figures would be quite unaccountable but for the facts I have stated. And small decreases, where one would on general grounds expect large increases, in Saharanpur and Moradabad, must be explained in the same way.

Large decreases in two districts call for separate notice. That in Almora is due to changes in the military garrison of Ranikhet. That in Gorakhpur is due to a mistake. The religion of the Doms of the Salvation Army Settlement was carelessly entered as "Dom," and "Dom" was tabulated as "Hindu" by the Central Office, the error being discovered too late to be rectified.

It is true of course that large numbers of those lost to the total of Christians are probably Christians of a loose type, imperfectly converted and easily influenced by persons of a hostile persuasion. But such converts were included in the total of 1911, and therefore the returns have been vitiated for the purpose of comparison with the returns of previous censuses. It is impossible to estimate with confidence what the true figures for Christians should be: but they increased between 1901 and 1911 by 74 per cent. and between 1891 and 1901 by 75 per cent. The rate of increase is unlikely to have dropped in this decade to much below 50 per cent. and I should say that Christians in the province now number at least 250,000¹.

An account of the principal missions at work in the Province was given in the last report, and there is nothing to be gained by going over the ground again. In all twenty-four missions have organisations here, but most of them are on a very small scale. Though there is great antagonism between them and the Arya Samaj, the appeal of Christianity and Aryaism, as I have pointed out in discussing the latter, goes home mainly to people of quite different type. The missions succeed almost exclusively with persons of low caste, and it is not unfair, I think, to say that they look for their best results to the second and subsequent generations. This is especially true of the Salvation Army in its work among the criminal tribes. Indian Christians are mainly found in small groups in towns and the larger villages, and ordinarily it is not until these groups grow sufficiently to be self-contained that the permanence of their conversion can be considered to be assured.

A contributed note on the work of the Christian missions operating in this province is printed as Appendix B at the end of this volume.

As regards the distribution of Christians by race, Europeans have decreased from 33,411 to 24,161. This decrease is due partly to the Indianisation of the services, partly to movements of the British garrison. The number of Anglo-

¹ Since writing the above I have been informed independently by the Honorary Secretary, Representative Council of Missions, that the number of converts on the mission books is "upwards of 250,000." This, of course, is the number of Indian Christians only, excluding Roman Catholics.

Indians is practically constant (9,267). Indian Christians have increased from 138,189 to 168,763, or by 22 per cent.

* As to the distribution by sect there is little that can be said. The recording of Christian sects is difficult, for the names can have no meaning to the ordinary enumerator. The difficulty is overcome to some extent by asking the missions to issue to their converts slips having the name of the sect written on them in vernacular. The missions were very dilatory in doing this and in consequence the number of Indian Christians who returned no sect is very large—nearly 28,000. Under these circumstances no conclusions can be drawn from the figures and the fact that only the Baptists, Presbyterians, and Roman Catholics show increases probably means no more than that the adherents of these sects were alone in getting their slips in good time. If the defectiveness of the sect statistics indicates that less importance is attached to sect now than ten years ago, I venture to suggest that the statistics are well lost.

*Other
Religions.
The Jains.*

8. Other Religions call only for the briefest notice. Jains continue to decrease; this community alone of all in the Province (except Jews who only number a few families) decreased between 1881 and 1911, and there seems no doubt that it is dying out. The reason is to be found in the fact (of which no explanation is forthcoming) that Jain marriages are infrequent, judged by Indian

	No. per 1,000 males of			No. per 1,000 females of		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
Hindus ..	449	458	98	305	516	179
Muhammadans	470	447	88	856	501	143
Aryas ..	472	422	104	346	486	168
Jains ..	496	378	131	344	493	223

standards, and of short duration. The figures in the margin illustrate this point. The Jains are concentrated in the Meerut and Agra divisions and in

the Jhansi district, and are mainly wealthy money-lenders and traders.

The Sikhs.

Of the Sikhs there are a certain number settled in the Meerut division into which they have overflowed from their home in the Punjab. Elsewhere they are almost entirely temporary residents and mainly soldiers and policemen. Buddhists are nearly all found in Kumaun and are traders and graziers from Tibet. The Brahmos are so few as to be negligible, and the Parsis and Jews are merchants who have been attracted by business prospects from the west to the larger cities and cantonments of this Province.

*The Buddhists,
Brahmos,
Parsis
and Jews.*

*The
distribution
of the loss of
population
among the
different
religious
communities.*

9. I return now to the point I noticed at the commencement of this chapter as the outstanding revelation of Table VI—the disproportionate share of the Province's loss in population that has been borne by the Hindus. That no part of this loss should be borne by the Aryas and Christians one would expect, for these are proselytizing religions. But the reason why Hindus should lose proportionately much more than Muhammadans calls for analysis.

The same disproportion between Hindu and Muhammadan losses was found in 1911, and in his report Mr. Blunt examined the possible explanations. In the result he accepted as established the allegation that the Muhammadans have greater vitality (including fertility) than the Hindus, and attributed this greater vitality to three causes—

- (1) that Muhammadans live in towns more than do Hindus;
- (2) that their diet is more liberal and varied;
- (3) that their social customs are more favourable to vitality, especially in respect of the later age at which girls are married, and of the absence of objection to widow remarriage.

He admitted however that the advantage of urban life had been offset during the decade by the greater exposure of town dwellers to plague. These are all admirable reasons why the Muhammadans should be more vital than the Hindus; but I do not propose to discuss them, because I can find no evidence of the greater vitality that they are supposed to cause. Mr. Blunt inferred it from the larger proportion of Muhammadan than of Hindu children under ten years of age, but vitality depends not on the birth rate but on the survival rate—that is to say on the surplus of births over deaths. And the census figures of 1911 when analysed do not suggest that Muhammadans had during the previous decade a more favourable survival rate than Hindus. The disproportionately large

losses of Hinduism are to be explained wholly by conversions to Christianity and the Arya Samaj. The gains of those two communities are almost exclusively made at the expense of the Hindus: and they amounted between

Decade 1901—1911.			
Total loss of population ..	480,000	..	Christian gains 77,000
Hindu actual loss ..	..	545,000	Arya gains 66,000
Number of Hindus in 10,000 of total population, 1901 ..	8,506		
Hindu proportionate share of total loss ..	$\frac{480,000 \times 8,506}{10,000} = 408,000$		
Excess of actual loss over proportionate share of loss, Hindus ..	..	137,000	
Excess of gains by proselytizing religions over disproportionat loss of Hindus ..	..	6,000	
		143,000	Total gain of proselytizing religions .. 143,000

1901 and 1911 to 143,000. The actual losses of the Hindus were 545,000. Their proportionate share of the total loss of population in the Province was 408,000. They lost therefore relatively to other communities, 137,000 more than

they should, that is to say, 6,000 less than the proselytizing religions had taken from them. I give in the margin the details of this calculation.

The disproportionate loss of Hindus in the present decade admits of the same simple explanation. The recorded increase of Christians and Aryas since 1911 amounts to 97,000. But I have estimated a further unrecorded increase of Christians of 47,000. The total estimated increase of the two communities is therefore 144,000. If Hindus had suffered only their proportionate share of the total loss of population, they would have decreased by 1,274,000. They have actually decreased by 1,412,000, or by 138,000 more than their proper share of the provincial loss. When the 47,000 persons conjecturally credited to Christians have been debited to Hindus, making the total disproportionate Hindu loss 185,000, there remain of this number only 41,000 persons to be accounted for. If in dealing with such large figures it is necessary to take cognizance of this small amount, it may well represent losses by emigration especially from the districts of Eastern Oudh. The labour which leaves these districts to find employment in Bengal is predominantly Hindu.

10. While therefore ample reasons are ready to hand to explain why Muhamadans should have more vitality than Hindus, this greater vitality hitherto alleged cannot be deduced from the figures, either of this census or of the last. Nothing (to digress for a moment) has more impressed me, as an amateur statistician writing a statistical report, than the fact that explanations grow on every bush and are far more plentiful than the phenomena that require them. I have doubtless laid myself open, time and again in the course of this report, to the taunt inherent in this observation. To conclude, if the brief discussion contained in this chapter calls for a finding, my finding is that the variations in rate of increase or decrease as between religions is accounted for by conversions in the case of Christianity and Aryaism, and by corresponding perversion in the case of Hinduism. There is no evidence that the rate of *natural* increase or decrease is affected by religion—or by differences of race or social habit that may go with religion—except in the case of the small Jain community.

Conclusion.

Subsidiary Table I.—General Distribution of the population by religion.

Religion	Locality.	Actual number in 1921.	Proportion per 10,000 of population in—					Variation per cent. (Increase + Decrease —).				Percentage net variation
			1921.	1911.	1901.	1891.	1881.	1911—1921.	1901—1911.	1891—1901.	1881—1891.	
			3	4	5	6	7	8	9	10	11	12	13
	United Provinces	39,292,926	8,448	8,504	8,532	8,610	8,627	-3.5	-1.4	+7.7	+6.1	+1.9
Hindu Brahma- nic	Himalaya, West ..	1,710,544	9,383	9,198	9,142	9,128	9,070	+0.04	+11.4	+2.8	+14.0	+33.7
	Sub-Himalaya, West ..	3,154,144	7,024	7,304	7,382	7,493	7,553	-8.6	-0.3	+0.6	+4.4	-5.4
	Indo-Gangetic Plain, West ..	9,746,547	8,025	8,128	8,201	8,293	8,351	-7.0	-2.8	+8.8	+8	-0.8
	Indo-Gangetic Plain, Central ..	10,408,034	8,732	8,750	8,74	8,799	8,807	-4.3	-3.9	+9	+8.4	+0.6
	Central India Plateau ..	1,921,588	9,304	9,329	9,345	9,371	9,399	-0.7	+4.7	-8.7	+3.4	-7.3
	East Satpuras ..	1,012,946	9,319	9,346	9,312	9,343	9,342	+1.2	-7	-7.1	+2.1	-4.6
	Sub-Himalaya, East ..	6,603,431	8,542	8,583	8,611	8,681	8,707	+2.7	+2.9	-6	+12.8	+18.6
	Indo-Gangetic Plain, East ..	4,734,695	9,021	9,001	8,953	8,983	8,962	+0.6	-4.7	-7.4	+5.4	-6.4
	United Provinces	6,724,967	1,446	1,411	1,411	1,353	1,343	2.6	-1.1	+6.5	+7.2	+9.1
Muham- madan.	Himalaya, West ..	94,312	517	697	788	820	881	-10.1	-2.1	-1.4	+5.6	-10.9
	Sub-Himalaya, West ..	1,264,504	2,816	2,561	2,539	2,455	2,416	-6.7	+1.9	+5.0	+6.9	-4.6
	Indo-Gangetic Plain, West ..	2,070,426	1,705	1,676	1,674	1,621	1,587	-4.1	-1.8	+13.0	+3.7	+10.9
	Indo-Gangetic Plain, Central ..	1,471,475	1,234	1,218	1,212	1,182	1,175	-2.8	-3.2	+3.9	+9.1	+6.6
	Central India Plateau ..	124,022	600	585	581	559	538	-3.9	+5.5	-4.8	+8.4	+4.5
	East Satpuras ..	71,604	659	640	670	648	647	+4.5	-5.5	-3.6	-1.3	-2.6
	Sub-Himalaya, East ..	1,121,312	1,450	1,410	1,383	1,316	1,290	+6.2	-5.2	+5.4	+3.3	+35.9
	Indo-Gangetic Plain, East ..	507,312	957	983	1,036	1,010	1,033	-1.8	-10.0	-4.7	+2.8	-13.0
	United Provinces	205,570	44	28	11	5	..	+56.2	+100.9	+196.0	..	+331.2
Hindu Arya.	Himalaya, West ..	5,159	28	17	13	7	..	+97.6	+44.5	+97.0	..	+463.2
	Sub-Himalaya, West ..	38,317	86	58	24	8	..	+49.2	+148.5	+197.7	..	+1,016.8
	Indo-Gangetic Plain, West ..	140,913	116	68	37	13	..	+59.7	+83.3	+205.9	..	+795.7
	Indo-Gangetic Plain, Central ..	12,037	10	7	3	1	..	+48.5	+148.1	+124.4	..	+726.7
	Central India Plateau ..	2,657	13	4	2	1	..	+173.6	+202.5	+25.4	..	+937.9
	East Satpuras ..	1,279	11	5	3	1	..	+145.0	+41.1	+232.7	..	+1,153.9
	Sub-Himalaya, East ..	2,901	4	2	1	..	..	+78.2	+218.0	+127.6	..	+2,890.7
	Indo-Gangetic Plain, East ..	2,307	4	7	1	..	..	-40.5	+4.9	+751.1	..	+2,583.6
	United Provinces	203,179	11	38	21	12	11	+13.1	+73.7	+73.3	+22.6	+326.2
Christian (a) all.	Himalaya, West ..	10,576	58	71	48	37	39	-5.7	+68.8	+32.6	+5.8	+126.0
	Sub-Himalaya, West ..	26,566	59	57	32	21	12	+1.1	+77.6	+53.2	+84.1	+442.2
	Indo-Gangetic Plain, West ..	130,500	107	81	39	17	12	+24.3	+105.3	+14.7	+40.6	+787.9
	Indo-Gangetic Plain, Central ..	24,555	21	20	17	14	15	-4.3	+15.5	+26.1	-1.9	+36.7
	Central India Plateau ..	5,234	26	21	17	9	5	+10.8	+30.8	+65.0	+111.2	+418.7
	East Satpuras ..	829	7	7	7	4	6	+12.8	+3.2	+53.1	-33.7	+18.3
	Sub-Himalaya, East ..	1,703	3	3	3	2	2	-32.6	+21.5	+28.9	+31.3	+38.6
	Indo-Gangetic Plain, East ..	3,416	7	7	4	4	5	-9.3	+55.5	+14.1	+19.8	+29.1
	United Provinces	168,763	36	29	14	5	3	+22.1	+98.2	+194.1	+76.6	+1,173.3
(b) Indian	Himalaya, West ..	4,916	27	29	26	17	11	-0.2	+37.5	+56.8	+79.1	+282.3
	Sub-Himalaya, West ..	24,034	54	46	23	11	4	+10.3	+105.3	+106.0	+183.1	+1,334.9
	Indo-Gangetic Plain, West ..	121,770	100	74	33	8	5	+28.0	+118.8	+320.1	+86.7	+2,098.8
	Indo-Gangetic Plain, Central ..	11,334	10	7	7	3	2	+23.1	+18.2	+119.8	+62.1	+418.5
	Central India Plateau ..	2,437	12	10	6	1	1	+11.5	+81.1	+463.5	-4.0	+992.8
	East Satpuras ..	420	4	4	4	1	2	+2.2	-7	+130.7	-19.4	+89.2
	Sub-Himalaya, East ..	1,142	1	2	2	1	1	-35.2	+23.2	+30.8	+15.0	+20.8
	Indo-Gangetic Plain, East ..	2,710	5	5	2	2	2	-3.0	+139.1	+17.1	-15.0	+129.5
	United Provinces	68,111	15	16	18	18	18	-10.1	-10.6	-2	+5.7	-14.8
Jain	Himalaya, West ..	465	3	2	3	2	2	+9.2	-8.0	+46.4	+13.9	+96.2
	Sub-Himalaya, West ..	4,488	10	12	16	17	18	-20.6	-21.1	-3.7	-3.9	-39.3
	Indo-Gangetic Plain, West ..	49,886	41	42	46	52	49	-8.1	-4.0	+8	+5.8	-12.9
	Indo-Gangetic Plain, Central ..	1,706	2	2	3	3	2	-37.5	-31.3	+14.2	+65.9	-18.6
	Central India Plateau ..	10,962	53	54	54	55	58	-8.8	+6.2	-10.4	-7	-13.8
	East Satpuras ..	101	1	1	2	2	2	-22.9	-41.7	-19.9	+20.6	-49.5
	Sub-Himalaya, East ..	170	..	2	3	1	..	4.5	-11.9	+130.4	+148.7	+359.5
	Indo-Gangetic Plain, East ..	353	1	1	1	3	..	+6.1	-21.4	+138.5	+2,342.8	+4,667.1
	United Provinces	14,266	3	2	3	2	8	-6.1	-1.0	+35.0	+211.5	+291.5
Sikh	Himalaya, West ..	1,513	8	8	4	6	1	+18.7	+105.2	-20.3	+377.5	+845.6
	Sub-Himalaya, West ..	2,137	5	7	7	5	1	-26.9	+4.4	+25.8	+348.1	+332.6
	Indo-Gangetic Plain, West ..	7,412	6	4	4	4	1	+41.6	-7.5	+9.8	+327.7	+515.1
	Indo-Gangetic Plain, Central ..	1,034	1	2	1	8	6	-65.9	+106.2	+49.7	+84.1	+39.4
	Central India Plateau ..	669	3	5	5	5	1	-38.8	+876.8	-86.4	+776.0	+452.9
	East Satpuras ..	277	2	1	6	2	6	+128.8	-82.5	+268.1	-51.5	-28.6
	Sub-Himalaya, East ..	997	1	1	2	1	8	+6.7	-24.4	+61.5	+44.1	+87.8
	Indo-Gangetic Plain, East ..	227	..	1	7	3	*	-29.8	-84.9	+1,745.8	+6,666.6	+7,466.7

Subsidiary Table I.—General Distribution of the population by religion—(concluded).

Religion.	Locality.	Actual number in 1921.	Population per 10,000 of population in —					Variation per cent. Increase + Decrease—).				Percentage not variation.
			1921.	1911.	1901.	1891.	1881.	1911—1921.	1901—1911.	1891—1901.	1881—1891.	1881—1921.
1	2	3	4	5	6	7	8	9	10	11	12	13
Parsi ..	United Provinces ..	925	*	2	1	*	*	+6.1	+50.9	+69.0	+200.0	+711.4
	Himalaya, West ..	59	*	*	1	*	*	+1,080.0	-64.3	+366.0	-57.1	+742.9
	Sub-Himalaya, West ..	42	*	*	*	*	*	+13.5	+94.7	-5.0	+11.1	+125.0
	Indo-Gangetic Plain, West ..	229	*	2	*	*	*	+8.5	+88.4	+47.4	+181.5	+748.1
	Indo-Gangetic Plain, Central ..	386	*	3	1	1	*	+15.0	+02.9	+56.8	+156.9	+656.9
	Central India Plateau ..	168	1	1	1	4	*	-37.1	+30.2	+130.3	+1,171.4	+2,300.0
	East Satpuras ..	7	*	*	1	..	..	+133.3	-70.2	..	..	†
	Sub-Himalaya, East ..	13	*	*	*	*	..	+30.0	+66.7	-68.4	..	†
	Indo-Gangetic Plain, East ..	21	*	*	*	*	*	+320.0	-28.5	+75.0	+ 0	+425.0
	United Provinces ..	488	*	1	2	3	..	-37.1	-1.0	-43.2	+1,246.6	+373.8
Buddhist	Himalaya, West ..	405	2	1	2	5	7	-42.9	+201.7	+240.6	+20.7	+365.5
	Sub-Himalaya, West ..	4	*	*	2	3	*	-55.5	-88.8	-27.0	+640.0	-73.3
	Indo-Gangetic Plain, West ..	6	*	*	1	4	..	-25.0	-97.3	-69.0	..	†
	Indo-Gangetic Plain, Central ..	50	..	..	..	3	..	+8.7	-77.3	-55.4	+46,300	+4,900.0
	Central India Plateau ..	..	..	..	*	*	..	..	..	+700.0	..	†
	East Satpuras ..	..	..	..	..	..	..	..	..	..	..	†
	Sub-Himalaya, East ..	..	..	*	*	..	..	-∞	-65.2	..	..	..
	Indo-Gangetic Plain, East ..	23	..	..	1	1	..	+∞	..	-69.8	..	†
Brahmo	United Provinces ..	183	*	*	*	*	*	+346.4	+10.8	+164.3	+133.3	+2,950.0
	Himalaya, West ..	14	*	*	*	..	*	+75.0	+300.0	..	..	+1,300.0
	Sub-Himalaya, West ..	9	*	..	..	..	*	+∞	..	..	..	+800.0
	Indo-Gangetic Plain, West ..	38	*	*	*	..	*	+157.0	+366.6	..	..	+1,800.0
	Indo-Gangetic Plain, Central ..	88	*	*	*	*	..	+528.0	-50.2	+16.6	..	..
	Central India Plateau ..	..	..	..	..	..	..	..	..	..	..	..
	East Satpuras ..	..	..	*	..	..	*	-∞	..	..	..	..
	Sub-Himalaya, East ..	6	..	*	..	..	*	+20.0	..	..	..	..
Jew ..	Indo-Gangetic Plain, East ..	28	..	..	..	..	..	+∞	..	..	..	..
	United Provinces ..	41	*	*	*	*	*	-18.0	-7.1	-10.0	-40.6	-59.1
	Himalaya, West ..	8	*	..	3	..	..	+∞	..	..	..	..
	Sub-Himalaya, West ..	..	..	..	..	..	*	..	..	..	..	..
	Indo-Gangetic Plain, West ..	3	*	*	*	..	*	-70.0	+400.0	..	..	-100.0
	Indo-Gangetic Plain, Central ..	20	*	*	*	*	*	-16.7	-7.7	-92.8	-48.0	-80.0
	Central India Plateau ..	..	..	..	..	..	..	..	..	+550.0	..	..
	East Satpuras ..	..	..	..	..	..	..	..	..	..	..	..
Others ..	Sub-Himalaya, East ..	..	..	*	..	..	*	..	..	..	..	..
	Indo-Gangetic Plain, East ..	10	..	*	*	*	*	-∞	-38.5	-45.8	-42.8	..
	United Provinces ..	12	*	..	..	..	..	+25.0	-27.3	+83.3	-25.0	-76.2
	Himalaya, West ..	1	*	..	..	..	..	..	..	..	..	..
	Sub-Himalaya, West ..	..	..	..	..	..	..	..	..	..	..	..
	Indo-Gangetic Plain, West ..	3	*	..	..	..	..	..	..	..	..	..
	Indo-Gangetic Plain, Central ..	8	*	..	..	..	..	..	..	..	..	..
	Central India Plateau ..	..	..	..	..	..	..	..	..	..	..	..

An asterisk (*) in columns 4 to 8 denotes that the proportion per 10,000 of population is less than .1.

† NOTE.—None of this religion was recorded here before 1891. The variation in column 13 is from 1891—1921.

Subsidiary Table II.—*Distribution by districts of the main religions.*

		Number per 10,000 of population who are—																			
District and natural division.		Hindus.					Muhammadans.					Christians.					Aryas.				
Serial number.		1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
	United Provinces ..	8,448	..	..	..	..	1,446	..	..	..	..	44	..	..	..	..	44	..	..	..
	United Provinces (British Territory) ..	8,464	8,504	8,532	8,610	8,627	1,428	1,411	1,411	1,353	1,343	44	38	21	12	11	45	28	14	5	
	Himalaya, West ..	9,383	8,198	9,142	9,128	9,076	517	697	788	820	881	58	73	48	37	39	28	17	13	7	
1	Dohra Dun ..	8,178	8,271	8,321	8,547	8,691	1,410	1,355	1,384	1,181	1,147	264	246	176	163	141	64	56	76	47	
2	Naini Tal ..	7,764	7,652	7,601	6,417	6,375	2,014	2,222	2,441	3,672	3,622	140	75	46	1	1	81	36	7	1	
3	Almora ..	9,908	9,868	9,874	9,757	9,723	57	68	87	212	228	29	56	31	28	48	2	4	4	..	
4	Garhwal ..	9,898	9,903	9,878	9,897	9,929	79	75	103	88	60	20	18	15	14	7	2	2	2	..	
5	Tohri State ..	9,943	9,939	9,941	9,935	9,945	56	58	57	59	54	..	2	..	1	..	..	1	1	..
	Sub-Himalaya, West ..	7,021	7,304	7,382	7,493	7,553	2,816	2,561	2,539	2,455	2,416	59	57	32	21	12	86	58	24	8	
6	Saharanpur ..	6,486	6,472	6,531	6,668	6,669	3,290	3,336	3,359	3,241	3,242	58	56	18	19	18	105	69	22	3	
7	Bareilly ..	7,174	7,322	7,519	7,592	7,666	2,592	2,523	2,399	2,856	2,309	136	115	66	50	23	98	35	11	6	
8	Bijnor ..	6,173	6,311	6,383	6,563	6,713	3,686	3,479	3,481	3,972	3,272	22	41	25	11	4	219	154	74	26	
9	Pilibhit ..	8,076	8,158	8,224	8,285	8,348	1,832	1,769	1,731	1,700	1,651	63	43	28	8	..	30	30	14	8	
10	Kheri ..	8,506	8,540	8,625	8,685	8,748	1,479	1,441	1,367	1,306	1,247	7	11	5	6	5	8	7	2	1	
11	Rampur State ..	5,209	5,349	5,460	5,621	5,591	4,713	4,605	4,523	4,374	4,409	54	33	9	1	..	20	9	5	..	
	Indo-Gangetic Plain, West ..	8,025	8,128	8,201	8,293	8,351	1,505	1,676	1,672	1,621	1,587	107	81	39	17	12	116	68	37	13	
12	Muzaffarnagar ..	6,777	6,918	6,918	7,020	7,055	2,850	2,868	2,910	2,833	2,819	81	32	16	2	1	184	77	36	13	
13	Meerut ..	7,198	7,404	7,439	7,527	7,599	2,286	2,270	2,337	2,278	2,244	208	119	79	40	31	161	78	33	20	
14	Bulandshahr ..	7,765	7,975	7,909	8,053	8,091	1,866	1,875	1,909	1,884	1,897	116	91	40	2	1	242	156	108	47	
15	Aligarh ..	8,418	8,507	8,609	8,801	8,824	1,247	1,229	1,240	1,153	1,149	142	102	42	4	3	173	136	80	10	
16	Muttra ..	8,858	8,908	8,912	9,030	9,106	956	941	1,010	778	865	98	91	30	12	5	60	35	13	3	
17	Agra ..	8,555	8,669	8,633	8,772	8,803	1,192	1,121	1,169	1,045	1,024	74	71	52	47	61	65	27	22	10	
18	Mainpuri ..	9,230	9,290	9,340	9,375	9,350	525	558	576	545	562	39	30	4	2	2	152	62	15	4	
19	Etah ..	8,662	8,719	8,784	8,872	8,915	1,047	1,048	1,071	1,040	1,015	145	127	51	7	2	93	52	36	11	
20	Budaun ..	8,104	8,162	8,267	8,353	8,464	1,702	1,674	1,638	1,601	1,530	135	107	60	27	3	58	53	28	13	
21	Moradabad ..	6,127	6,212	6,386	6,557	6,617	3,698	3,589	3,530	3,398	3,330	140	135	51	28	16	91	55	24	11	
22	Shahjahanpur ..	8,389	8,472	8,572	8,569	8,580	1,547	1,471	1,453	1,407	1,403	41	42	20	14	16	22	14	18	7	
23	Farrukhabad ..	8,729	8,760	8,799	8,808	8,835	1,163	1,169	1,154	1,158	1,116	35	28	12	10	9	66	45	23	10	
24	Etawah ..	9,307	9,306	9,383	9,384	9,403	586	600	672	582	574	17	9	3	2	2	69	59	11	2	
	Indo-Gangetic Plain, Central ..	8,732	8,750	8,764	8,799	8,807	1,234	1,218	1,212	1,182	1,175	21	20	17	14	15	10	7	3	1	
25	Cawnpore ..	8,947	9,013	9,061	9,127	9,184	972	910	891	839	788	52	46	35	25	27	24	22	8	5	
26	Fatehpur ..	8,797	8,813	8,887	8,895	8,912	1,162	1,157	1,156	1,102	1,085	6	2	2	1	1	32	7	3	..	
27	Allahabad ..	8,635	8,589	8,602	8,866	8,639	1,274	1,347	1,340	1,290	1,324	49	48	46	38	41	6	4	2	..	
28	Lucknow ..	7,780	7,748	7,838	7,816	7,750	2,095	2,102	2,052	2,084	2,151	104	113	91	75	90	12	13	5	7	
29	Unao ..	9,128	9,166	9,195	9,201	9,235	859	835	802	796	764	2	1	1	1	1	11	7	2	1	
30	Rao Bareilly ..	9,101	9,134	9,130	9,173	9,183	894	861	868	830	813	2	2	1	1	1	2	2	1	..	
31	Sitapur ..	8,475	8,479	8,507	8,524	8,544	1,514	1,508	1,483	1,466	1,448	5	5	6	7	5	5	5	1	1	
32	Hardoi ..	8,874	8,912	8,910	8,969	8,961	1,093	1,066	1,079	1,031	1,039	9	10	5	1	1	24	11	6	..	
33	Fyzabad ..	8,893	8,869	8,868	8,841	8,835	1,091	1,109	1,111	1,137	1,162	12	17	12	10	12	3	3	2	..	
34	Sultampur ..	8,838	8,887	8,891	8,912	8,939	1,159	1,169	1,105	1,086	1,080	1	1	1	1	1	2	2	..	..
35	Partabgarh ..	8,902	8,957	8,959	9,000	9,008	1,094	1,040	1,037	997	991	..	1	1	1	1	2	1	1	..	
36	Bara Banki ..	8,260	8,325	8,298	8,314	8,329	1,728	1,666	1,691	1,644	1,655	1	2	2	1	1	5	2	..	..
	Central India Plateau ..	9,304	9,329	9,345	9,371	9,399	600	585	581	559	538	26	21	17	9	5	13	4	2	1	
37	Jhansi ..	9,203	9,251	9,269	9,353	9,443	543	502	501	424	328	68	58	50	38	12	4	3	1	2	
38	Jalaun ..	9,302	9,308	9,364	9,351	9,383	655	677	627	643	614	6	5	2	2	..	30	3	3	..	
39	Hamirpur ..	9,318	9,329	9,336	9,348	9,344	650	655	655	618	655	15	8	6	..	..	13	6	1	1
40	Banda ..	9,396	9,423	9,414	9,416	9,410	586	564	576	576	582	3	3	3	1	4	10	5	1	1	
	East Satpuras ..	9,319	9,346	9,342	9,343	9,342	659	640	670	648	647	7	7	7	4	6	11	5	3	1	
41	Mirzapur ..	9,369	9,340	9,312	9,343	9,342	597	640	670	648	647	11	7	7	4	6	17	5	3	1	
42	Benares State ..	9,217	..	..	..	..	782	..	..	..	..	1	..	..	..	..	..	..	..	..
	Sub-Himalaya, East ..	8,542	8,583	8,611	8,681	8,707	1,450	1,410	1,383	1,316	1,290	3	3	3	2	2	4	2	1	..	
43	Gorakhpur ..	8,978	8,982	8,989	8,988	8,998	1,012	1,009	1,004	1,007	998	3	5	5	4	4	7	3	1	..	
44	Basti ..	8,306	8,333	8,375	8,456	8,453	1,692	1,665	1,523	1,544	1,516	1	4	1	..	..	2	2	..	..
45	Gonda ..	8,313	8,388	8,474	8,588	8,672	1,683	1,806	1,521	1,408	1,326	3	4	2	2	1	1	1	1	..	
46	Bahraich ..	7,950	8,064	8,147	8,297	8,362	2,036	1,923	1,842	1,698	1,631	1	3	2	1	1	2	1	1	..	
	Indo-Gangetic plain, East ..	9,021	9,001	8,953	8,986	8,962	967	983	1,036	1,010	1,033	7	7	4	4	5	4	7	1	..	
47	Benares ..	8,925	8,884	8,943	9,021	8,979	1,046	1,030	1,030	959	1,001	21	22	18	15	20	4	7	2	..	
48	Jaunpur ..	9,115	9,107	9,087	9,076	9,060	879	876	910	919	939	1	1	1	1	1	5	16	2	..	
49	Ghazipur ..	9,082	9,079	9,004	9,041	9,010	911	912	982	951	983	4	7	5	5	6	3	2	1	..	
50	Ballia ..	9,353	9,363	9,321	9,291	9,250	629	623	674	704	750	11	12	..	..	..	6	2	..	..
51	Asamgarh ..	8,794	8,739	8,585	8,695	8,683	1,200	1,252	1,403	1,305	1,316	1	1	1	1	..	4	8	1	..	

Subsidiary Table III.—Christians—Number and variations.

Serial number.	District and natural division.	Actual number of Christians in —					Variation per cent.				
		1921.	1911.	1901.	1891.	1881.	1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1881 to 1921.
1	2	3	4	5	6	7	8	9	10	11	12
	United Provinces	203,179	179,694	102,955	58,518	47,673	+13	+75	+76	+23	+326
	<i>Himalaya, West</i>	<i>10,576</i>	<i>11,213</i>	<i>6,642</i>	<i>4,940</i>	<i>1,671</i>	<i>-6</i>	<i>+68</i>	<i>+31</i>	<i>+6</i>	<i>+126</i>
1	Dehra Dun ..	5,603	5,035	3,134	2,743	2,025	+11	+61	+14	+35	+177
2	Naini Tal ..	2,413	2,413	1,417	23	11	+1	+70	+6,061	+109	+22,109
3	Almora ..	1,547	2,919	1,427	1,601	2,393	-17	+105	-11	-33	-35
4	Garhwal ..	974	845	664	573	242	+15	+27	+16	+137	+302
5	Tohri State ..	6	6	13	14	9	±0	-51	-7	-56	-33
	<i>Sub-Himalaya, West</i>	<i>26,566</i>	<i>24,550</i>	<i>13,822</i>	<i>9,023</i>	<i>1,900</i>	<i>+1</i>	<i>+78</i>	<i>+53</i>	<i>+81</i>	<i>+142</i>
6	Saharanpur ..	5,479	5,548	2,972	1,971	1,793	-1	+87	+51	+10	+206
7	Bareilly ..	13,708	12,591	7,148	5,271	2,394	+9	+76	+36	+120	+473
8	Bijnor ..	1,652	3,315	1,333	908	399	-50	+71	+113	+204	+453
9	Pilibhit ..	2,697	2,085	1,290	365	18	+29	+61	+255	+1,928	+14,883
10	Kheri ..	596	1,011	473	505	397	-41	+114	-6	+27	+50
11	Rampur State ..	2,434	1,739	473	63	..	+40	+268	+651	..	..
	<i>Indo-Gangetic Plain, West</i>	<i>130,500</i>	<i>101,992</i>	<i>51,115</i>	<i>20,671</i>	<i>14,697</i>	<i>+21</i>	<i>+105</i>	<i>+117</i>	<i>+41</i>	<i>+788</i>
12	Muzaffarnagar ..	6,415	2,583	1,402	127	54	+148	+81	+1,004	+135	+11,780
13	Meerut ..	31,119	18,142	12,203	5,435	4,063	+72	+49	+125	+34	+666
14	Bulandshahr ..	12,411	10,111	4,528	210	115	+23	+123	+205	+82	+10,692
15	Aligarh ..	15,120	11,947	5,055	465	289	+27	+136	+987	+61	+5,132
16	Muttra ..	6,087	5,992	2,262	816	338	+2	+165	+167	+150	+1,701
17	Agra ..	6,818	7,229	5,522	4,758	4,997	-6	+31	+16	-5	-436
18	Mainpuri ..	2,935	2,395	353	132	146	+23	+578	+167	-10	+1,910
19	Etah ..	12,030	11,077	4,565	520	117	+9	+154	+739	+341	+10,182
20	Budaun ..	13,136	11,298	6,110	2,581	309	+16	+85	+137	+735	+4,151
21	Moradabad ..	16,716	17,023	6,103	3,307	1,877	-2	+179	+85	+76	+791
22	Shahjahanpur ..	3,455	3,954	1,963	1,308	1,408	-13	+112	+40	-6	+145
23	Farrukhabad ..	3,016	2,548	1,128	828	826	+18	+126	+36	±0	+265
24	Kanawh ..	1,242	693	245	134	158	+79	+183	+83	-15	+686
	<i>Indo-Gangetic Central Plain,</i>	<i>24,355</i>	<i>25,441</i>	<i>22,032</i>	<i>17,475</i>	<i>17,812</i>	<i>-4</i>	<i>+15</i>	<i>+26</i>	<i>-2</i>	<i>+37</i>
25	Cawnpore ..	5,929	5,254	4,414	3,036	3,200	+13	+18	+45	-5	+85
26	Fatehpur ..	399	142	145	71	88	+181	-2	+104	-19	+353
27	Allahabad ..	6,873	7,055	6,814	5,933	6,079	-3	+1	+15	-2	+13
28	Lucknow ..	7,530	8,660	7,247	6,769	6,280	-13	+19	+26	-8	+20
29	Unao ..	175	123	136	105	49	+42	-10	+28	+116	+267
30	Rao Bareilly ..	170	219	117	145	123	-22	+87	-19	+18	+38
31	Sitapur ..	587	569	761	717	443	+3	-24	+6	+62	+33
32	Hurdoi ..	988	1,111	513	167	75	-11	+117	+207	+123	+1,217
33	Fyzabad ..	1,426	1,911	1,502	1,254	1,294	-25	+27	+20	-3	+10
34	Sultanpur ..	130	134	103	53	55	-3	+30	+94	-4	+136
35	Partabgarh ..	19	72	102	77	48	-74	-29	+32	+40	-60
36	Bara Banki ..	129	221	188	147	78	-12	+18	+28	+88	+65
	<i>Central India Plateau</i>	<i>5,234</i>	<i>4,726</i>	<i>3,616</i>	<i>2,431</i>	<i>1,009</i>	<i>+11</i>	<i>+31</i>	<i>+70</i>	<i>+111</i>	<i>+119</i>
37	Jhansi ..	4,162	3,970	3,064	1,940	700	+5	+30	+58	+177	+493
38	Jalaun ..	251	195	91	67	14	+29	+107	+40	+379	+1,693
39	Hamirpur ..	664	363	272	50	17	+83	+33	+444	+194	+3,806
40	Banda ..	167	198	186	74	278	-16	+6	+151	-73	-40
	<i>East Satpuras</i>	<i>829</i>	<i>735</i>	<i>712</i>	<i>465</i>	<i>701</i>	<i>+13</i>	<i>+3</i>	<i>+53</i>	<i>-34</i>	<i>+18</i>
41	Mirzapur ..	796	736	712	465	701	+15	+3	+53	-31	+18
42	Bonares State ..	33	..	..	..	..	-20	..	..	..	..
	<i>Sub-Himalaya, East</i>	<i>1,703</i>	<i>2,526</i>	<i>2,078</i>	<i>1,614</i>	<i>1,229</i>	<i>-33</i>	<i>+22</i>	<i>+29</i>	<i>+31</i>	<i>+39</i>
43	Gorakhpur ..	853	1,008	1,443	1,176	993	-47	+11	+23	+26	-9
44	Basti ..	114	69	93	66	78	+65	-26	+14	-15	+46
45	Gonda ..	486	501	321	248	159	-3	+56	+23	+56	+206
46	Bahraich ..	250	348	231	134	59	-28	+58	+78	+110	+324
	<i>Indo-Gangetic Plain, East</i>	<i>3,416</i>	<i>3,766</i>	<i>2,422</i>	<i>2,122</i>	<i>2,645</i>	<i>-9</i>	<i>+53</i>	<i>+11</i>	<i>-20</i>	<i>+29</i>
47	Bonares ..	1,857	1,930	1,597	1,364	1,768	-4	+21	+17	-23	+5
48	Jaunpur ..	121	117	116	93	120	+3	+1	+25	-23	+1
49	Ghazipur ..	374	508	491	576	648	-34	+16	-15	-11	-42
50	Ballia ..	947	1,008	33	15	32	-6	+2,953	+120	-53	-2,859
51	Azamgarh ..	117	143	185	74	77	-18	-23	+150	-4	+52

* NOTE.—Percentages are adjusted for Bonares State, created after the 1911 Census.

Subsidiary Table IV.—*Religions of Urban and Rural population.*

Natural division.	Number per 10,000 of urban population who are—			Number per 10,000 of rural population who are—		
	Hindu.	Muham- madan.	Others.	Hindu.	Muham- madan.	Others.
1	2	3	4	5	6	7
United Provinces ..	5,941	3,741	318	8,745	1,174	81
1. Himalaya, West ..	6,850	2,387	763	9,575	377	48
2. Sub-Himalaya, West ..	4,175	5,494	331	7,538	2,334	128
3. Indo-Gangetic Plain, West ..	5,678	3,901	421	8,449	1,807	244
4. Indo-Gangetic Plain, Central ..	6,156	3,587	257	9,003	987	10
5. Central India Plateau ..	7,005	2,025	370	9,548	396	56
6. East Satpuras ..	7,978	1,870	152	9,440	542	18
7. Sub-Himalaya, East ..	6,790	3,134	76	8,607	1,388	5
8. Indo-Gangetic Plain, East ..	6,932	3,000	68	9,230	744	6

Chapter V.—AGE.

The age statistics are exhibited in Imperial Table VII. That no reliance can be placed on the accuracy of these statistics, so far as this province is concerned, has been emphasised in every census report; but in my opinion it has never been emphasised sufficiently. The ordinary educated Indian has very vague ideas about his own age. The uneducated Indian has practically no ideas at all. And a man who does not know his own age is unlikely to know the ages of other people. The head of the house who answered the enumerator's questions not only for himself but also for his family, might have some idea of the age of his sons, especially if these attended school or had entered or hoped to enter Government service; he would have less idea of the age of his daughters; very little of that of his wife, which he had never accurately known; and practically none of that of the mothers-in-law and paternal aunts who happened to be quartered upon him. Enumerators were instructed to record the age as stated, if the statement appeared reasonable; otherwise to endeavour to fix it by questions with reference to well-remembered events such as famines; failing to obtain a clue on these lines, to estimate it as best they could and enter accordingly. It is obvious that while a man may well remember that he had just begun to follow the plough in the year of the great famine, he cannot call up similar memories vicariously for his uncle or his grandmother. Again, if the head of the house has no clear recollection of past events, the enumerator has the man before him and at any rate the materials for an estimate. The uncle is not before him, but is probably well known to him; a shrewd guess should be possible in this case also. The grandmother he is unlikely to have noticed, and if she happens to be in *parda*, he has never even seen her. The age recorded in this case may well miss the mark by decades.

The Age Statistics and their value.

For the guessing of the age of others is not the Indian's strong point, even where he is educated and intelligent. During the period when the staff was being trained, I had my own age guessed by hundreds of supervisors and enumerators; and the estimates were seldom within five years of the truth, and varied between 16 and 60. It is true that at the time my liver was functioning in an irregular manner, and that some variation was justified by that fact. But I do not think that I ever looked to be of an age within 15 years of the two extremes mentioned.

It might be expected that the age of very young children would be accurately recorded. That they were not is at once obvious from the figures. The reason for this lies in a mistake of procedure inherited from past censuses which should on no account be repeated. The instructions directed enumerators to write in the age column, for infants under a year of age, the word "*bachcha*" (infant). The object of this direction was to defeat the tendency to record the age in months. But no more unfortunate word could have been chosen; for *bachcha* is popularly used to describe children until they are three or four years old, and loosely even when they are much older. What would constantly happen in consequence of this direction is (when one thinks about it) obvious: I have witnessed it myself. "Who else is there in the house?" "There is my son and daughter-in-law and their child". Then after the two adults have been dealt with "and how old is the child?" "Oh, he is merely an infant (*bachcha*)."

The enumerator remembers that *bachcha* is an authorised entry in the age column, and down the word goes.

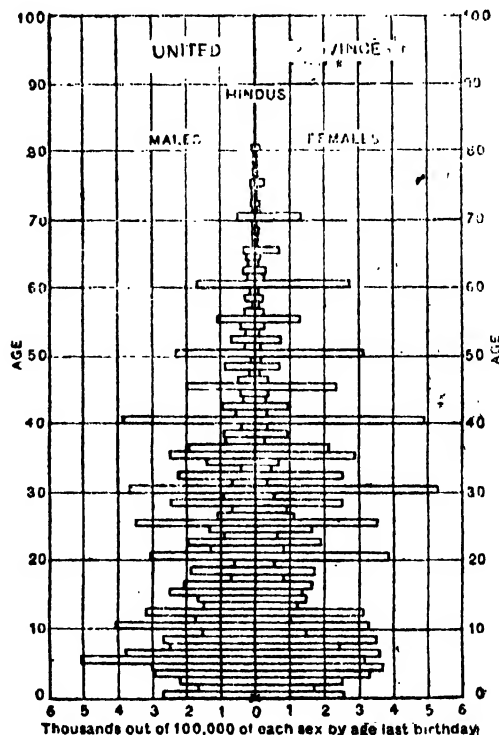
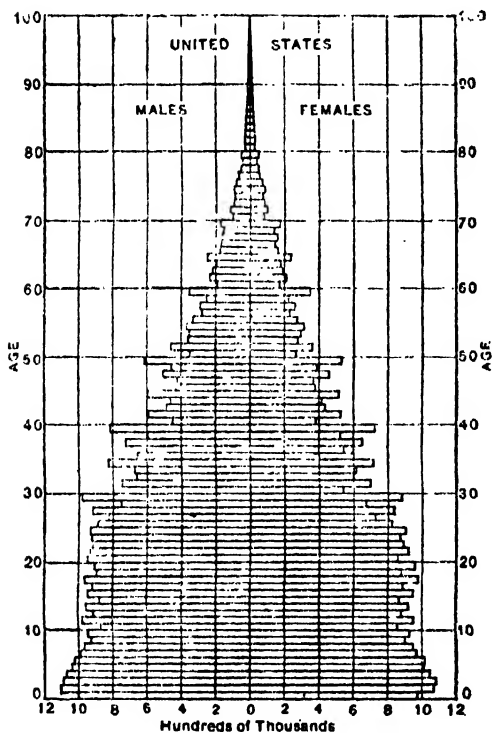
So much for unintentional error in recording age. There is also deliberate misstatement to be considered. This is not nearly so serious a matter. It is certainly no more prevalent than in European countries; probably much less prevalent. It is alleged that there is a tendency to understate the age of unmarried females whose real age is between 12 and 20, the reason being that

among Hindus to have an unmarried daughter who has reached the age of puberty is considered disgraceful. So it is. But with males vastly outnumbering females, it seldom happens. It is enough to say that neither at this census nor at the last do the figures bear out this allegation.

We are concerned then only with unintentional error, but this is so great as to make the crude figures largely valueless. Previous reports have described, and a glance at the tables is enough to prove, how the uncertainty of age results in excessive grouping at the multiples of five, and especially at the multiples of ten; also to some extent at numbers ending in 2. But I do not personally accept the implication contained in these previous reports that the figures, though clearly inaccurate as between single years, are reasonably accurate as between quinary periods: that is to say, that the real age of a man entered as aged 40 is nearer to 40 than to 35 or 45. I myself think that it is almost as likely to be 30 or 50. The use of quinary periods may give results approximating to the truth in the case of the young, but not, I am convinced, in the case of the middle-aged and old.

Age statistics therefore obtained under the conditions described must be expected to be inaccurate throughout, but more accurate for men than for women and for the young than for the old: and to be characterised by much piling up of the figures at the age 0-1, at the multiples of 10 and 5 (especially in the case of women), and to a certain extent at numbers ending in 2. Any tabulation by single years is little better than farcical, and tabulation by quinary periods is progressively more unreal as the age increases.

That this expectation is realised can best be illustrated graphically. Below is shown in the form of a pyramid the age distribution by sex of the United States (1910)*. It is obvious that the accuracy of the age returns on which this diagram is based can best be gauged by the degree to which the diagram attains to perfect pyramidal shape: the American age returns are therefore fairly reliable. Compare now the corresponding structure based on the selected population of this province whose age has been tabulated by single years (see Subsidiary Table I). This structure (to call it a pyramid would be an insult to the



Pharaohs) bears out generally what has been stated in this paragraph.

The factors making for inaccuracy have however been constant at each census, and the statistics are therefore comparable with those of previous decades; and they approximate to the truth sufficiently to enable inferences

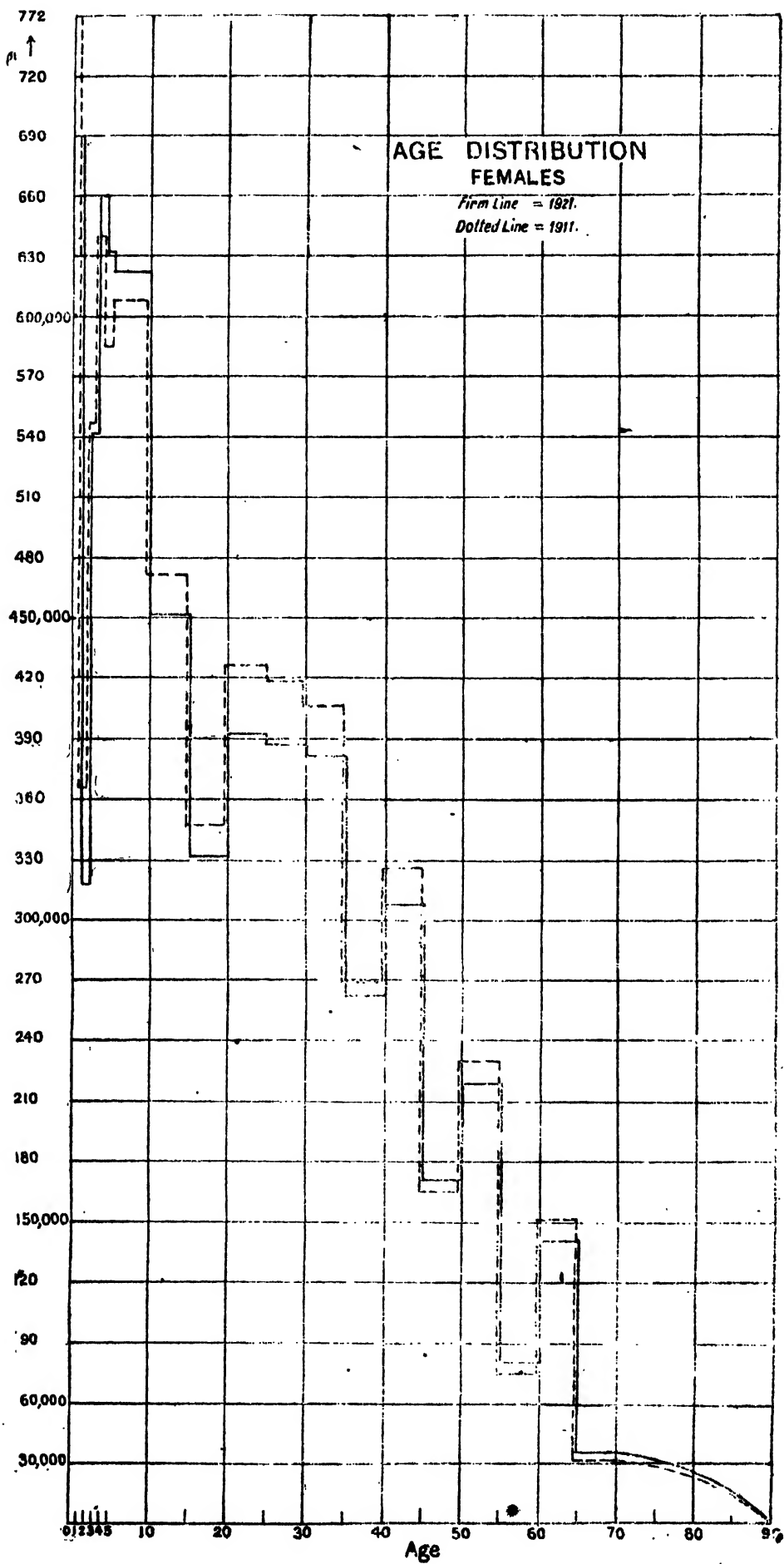
* Whipple "Age Statistics," p. 183.

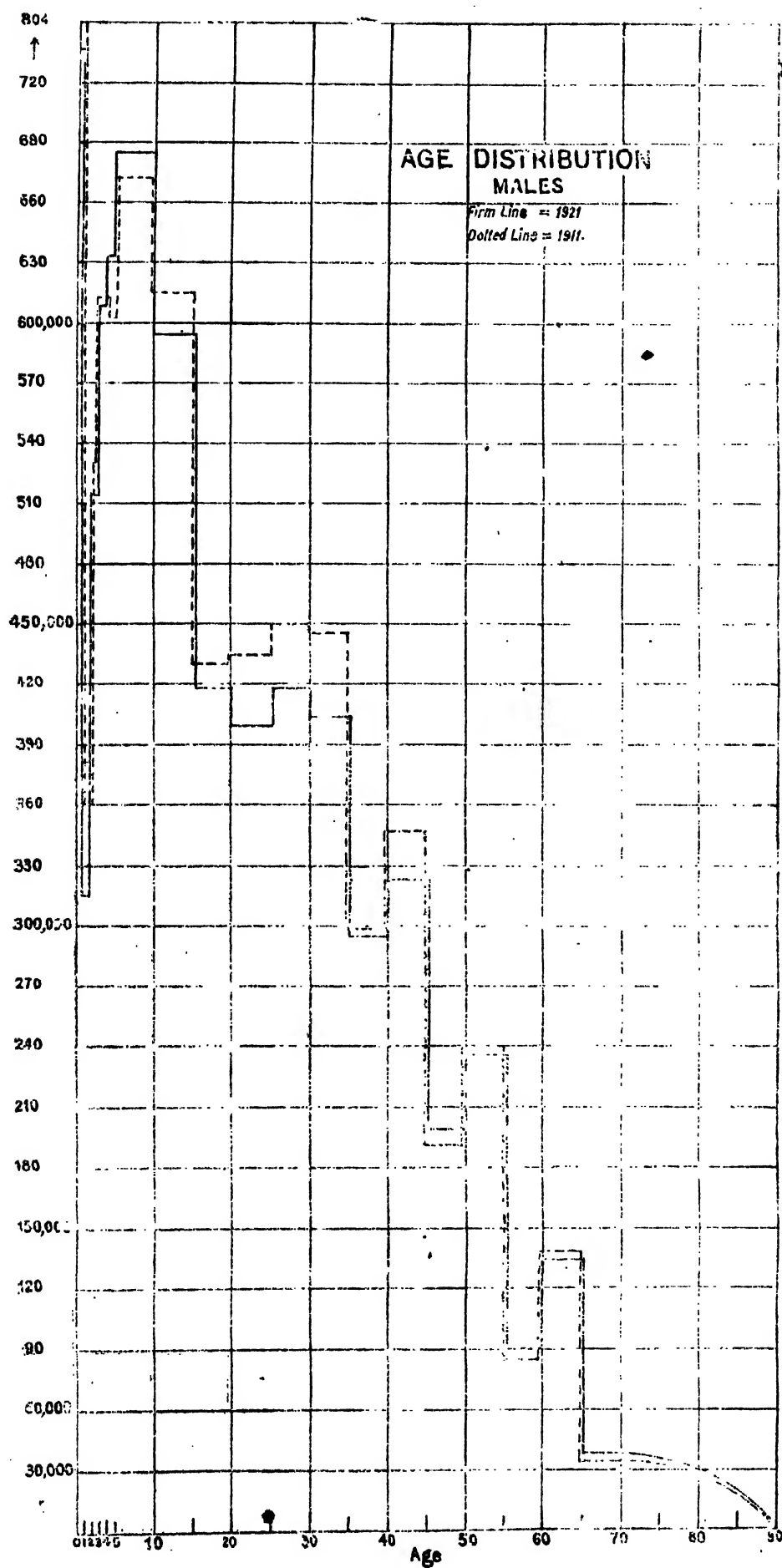
to be drawn from them in regard to well-defined periods of life, such as infancy, the early married life of women, the reproductive ages, and senility.

2. These inaccurate statistics can be smoothed out in various ways—notably by the Bloxam method, whose object is to get rid of the error caused by excessive grouping at multiples of 5 and 10. But life tables are being prepared from the age returns by the Government Actuary, and it would be unprofitable for a layman to touch upon a subject with which an expert is to deal. Moreover the expert, being in blissful ignorance of the conditions under which his raw material was collected, will perhaps have the additional advantage of being able to treat it seriously. A layman may however without presumption attempt to discover what the statistics tell us about the population in terms of the larger age periods, and about the changes in its constitution that have occurred since previous censuses were taken.

On the next two pages are printed two graphs, showing separately for males and females the distribution of the population by age, and the corresponding distribution of 1911.

The age constitution of the population; and changes therein that have occurred during the decade.





These graphs make immediately apparent the great inaccuracy of the age returns. It is obvious that if the returns were accurate the graph would take the form of a continuous downward curve; unless any particular year had had a very abnormally high birth rate, or a calamity had occurred which discriminated markedly against people of a particular age—in either of which cases the continuity of the curve might be interrupted. The absence of verisimilitude in the graph cannot however be explained—or can only be very partially explained—in this way. For the general direction of the curve is the same for this, the last, and indeed for every census.

The graphs make the excessive piling up at age 0-1 outstandingly apparent. That there should be a drop between this age and age 1-2 is of course proper, and one would expect, in view of the high infantile mortality of the province, a big drop; especially as, in all countries where calculations have been made, an infant's chance of survival increases continuously from birth till the stage of infancy is well past. But the drop revealed by the graph is so great that its absurdity need not be demonstrated. The degree by which it surpasses the truth cannot—at any rate without abstruse calculations which the accuracy of the material dealt with does not warrant—be calculated from the ascertained infantile mortality rate. For age 0-1 includes infants of all ages up to 364 days, of whom some have surmounted and some have only just begun to encounter the most serious dangers of infancy.

For the years between 1—5 the figures obviously bear so little relation to reality that it seems to me useless to attempt to theorize about them¹. For boys the numbers increase between the second and fifth completed years. In 1911 they did the same, except that there was a small decrease at age 4-5. In reality of course there must have been a decrease at each succeeding age in both decades. In the case of girls the numbers increase at the ages 2-3 and 3-4 and decrease at age 4-5 both in 1911 and 1921.

After age 4-5 the graphs show ages up to 70 by quinary periods only. They now reveal the general downward tendency that they should; but in detail they illustrate little more than the extent to which the age period containing the figures ending in 0 and 2 attracts at the expense of the period containing the figure ending in 5. The round number however was apparently less attractive in 1921 than in 1911, which is perhaps a sign that ages are more accurately known now than they were ten years ago.

Once the infancy period is passed, the graph of 1921 rises and falls at the same points as does the graph of 1911: except—

- (1) At the period 5—10 for females, when a fall in 1921 corresponds to a considerable rise in 1911.
- (2) At the period 20—25 for males, when a considerable fall in 1921 corresponds to a slight rise in 1911.

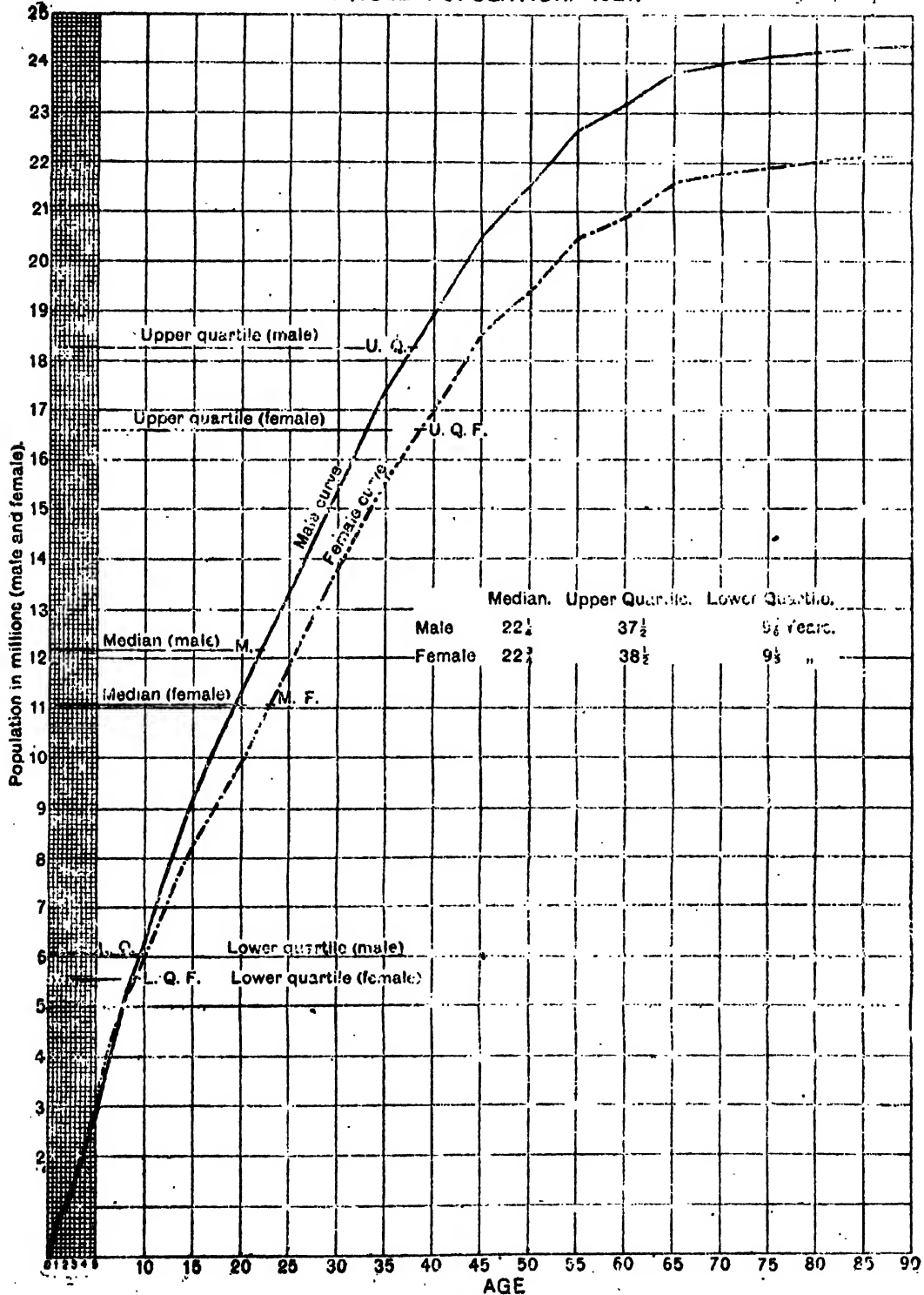
As to the first exception, it is dangerous to advance any theories where the ages under 5 influence the phenomenon to be explained; for the fall is relative only to the period 4-5: in the absolute figures there is a rise relatively to 1911. But the influenza epidemic is doubtless in some way accountable. The second exception must be considered together with the fact, also very apparent from the graphs, that the difference in absolute numbers between the populations of 1911 and 1921 is most marked for both sexes in the age period 20—35, where 1921 has lost heavily to 1911. The explanation can only be that the influenza epidemic was most fatal to people in this age period, and of them to males in the period 20—25: who at the time of the epidemic would have been—to speak pedantically—between $17\frac{1}{2}$ and $32\frac{1}{2}$ and between $17\frac{1}{2}$ and $22\frac{1}{2}$ years old respectively.

The absolute figures are remarkable in another respect. They show that in spite of the great loss of population of all ages combined, 1921 had a considerable advantage over 1911 in respect of males of ages 4-5 and 5—10, of females of ages 3-4, 4-5, and 5—10, and to a much smaller extent of very old people of

¹ To illustrate the danger of such an attempt: children (both sexes) at ages 0-1, 1-2, and 2-3 number respectively 1,423,853; 682,477; and 1,055,569. The number for 1-2 is *prima facie* absurd; but the bulk of the children of this age were born in the last three quarters of the year 1919, and the reader may jump to the conclusion that the defect represents the children who would have been born but for the damage done to their potential mothers by influenza in November, 1918. But look first at the figures for these ages in 1911—1,545,630; 712,829; and 1,067,882. In these the reader may find corroboration for his conclusion, for in 1908 (which in that decade answers to 1918 in this) there was a most severe epidemic of malaria. Very good. But to make quite sure, examine the corresponding figures for 1901. These were 1,471,576; 658,271; and 1,303,106. The year 1898 was prosperous and healthy.

both sexes. The explanation must again be found in the way in which the influenza epidemic differentiated against different ages ; for the epidemic undoubtedly dominated all the variations in population found at this census. But the explanation of the phenomenon is not so important as the inferences which may be drawn from it ; and these should be considered in connection with the summation curve (a curve showing at each age the total number of persons below that age) reproduced below.

SUMMATION CURVE FOR UNITED PROVINCES
(WHOLE POPULATION) 1921.



From this curve is deduced the "median" age of the population : that is to say, where the whole population amounts to n persons, and is set out in line and numbered off in order of age, the age of the person whose number is $\frac{n+1}{2}$. The

median age so deduced is 22½ years for males, and 22¾ years for females: but 6 months must be added in each case, for the age recorded in the schedules was the number of completed years, and theoretically a person only 12 hours short of his 31st birthday was put down as aged 30. The correct figures are therefore 22 years 9 months and 23 years 3 months respectively. These are very low medians, though only in the case of females lower than those of 1911, when the figures were 22 years 9 months and 23 years 6 months. The median age of the United States (both sexes combined) in 1910 was 24 years 5 months. Now relatively low median age must obviously mean a relatively large preponderance of the young over the old in the population.

Before however any conclusion is come to as to the age composition of the

Year.	Mean age.			
	Male.		Female.	
	Yrs.	ms.	Yrs.	ms.
1901	24	10½	25	6½
1911	25	1	25	8

selected population whose age

Community.	Mean age, 1921.			
	Male.		Female.	
	Yrs.	ms.	Yrs.	ms.
Hindu	23	7½	25	9
Muhammadian	23		23	7½

people, the matter should be examined in another way. The "mean" age is the average age of the population. Where ages are tabulated only by quinary periods this can clearly be calculated only by an approximate formula. It was so calculated in 1901 and 1911, but I cannot discover the particular formula used. The means were found to be as shown. For comparison, not being able to use the same formula for the whole population¹, I have taken the means for the was tabulated by single years. Those are as in the margin. They are very low. The mean age of the United States in 1900 was 26 years 3½ months. And they are very much lower than those of 1911.

Now a low mean age may point to one or both of two things—a relatively large proportion of children, or relatively early deaths among adults. The very great decrease in the mean is evidently due partly to the heavy mortality at the ages between 20 and 35; partly to the large

proportion, relatively to the last two decades, of children who have survived the most dangerous period of infancy and will begin to reach the reproductive age in a few years. And herein lie the factors of recovery from the calamities of the last decade. Recovery cannot be looked for at once. Females between ages of 20 and 35 represented 27·2 of the total in 1911, and represent only 26·2 now. But though poor in women of immediately reproductive age, the population is rich in potential mothers.

The calculations graphically shown suggest therefore that in the absence of serious calamities or other abnormally disturbing factors, the population while not recovering ground to any great extent for the first half of the next decade, will do so subsequently with great rapidity.

3. The vital statistics, so far as they go, generally support these conclusions. According to these, between 1911 and 1918 the population increased by about three and a half millions. In 1918 it lost two millions, and was therefore at the end of that year about one and a half millions larger than in 1911. In fact, as I have attempted to show in the first chapter, when errors in the vital statistics and emigration have been taken into account, it was probably smaller than in 1911 by about a million. The births in 1911 and 1912, on an ascertained population of forty-seven millions, numbered about two millions for each year. In 1919 on a population of forty-six millions, births would be expected to number about 1,950,000. In fact they numbered 1,516,000 in 1919—1920 the population decreased according to the vital statistics by not less than half a million. Births in 1920 should number 1,925,000. They actually numbered 1,664,000: still much less than they should, but proportionately much more than in 1911.

The process forecasted from the census figures is shown by the vital statistics to have begun already.

How far the vital statistics corroborate the conclusions drawn from the census returns.

¹ Since writing the above I have discovered the formula used, but not the calculations on which it is based. It gives for 1921 a mean of 25 years 8½ months for males and 25 years 7½ months for females. It is not clear however whether 6 months should be added to (or possibly subtracted from) these figures or not, or whether 6 months were added to or subtracted from the figures of 1911 or 1901.

The result differs so largely from that given by using the "selected" population that the formula does not inspire much confidence.

4. The general conclusion arrived at then is that although owing to a series of calamities the population has retrogressed since the beginning of the century, it is as now constituted essentially progressive. The arguments on which this conclusion is based, however, are vitiated by the fact that age figures for single years and quinary periods have been used—figures on which admittedly little reliance can be placed. It is therefore advisable to examine the results given by using the longer periods commonly adopted in demographic study, for which the figures cannot but be reasonably accurate: these are 0-14, 15-49, and 50-onwards: prematurity, maturity, and postmaturity.

The evidence of the census returns tested by Sundbärg's formula.

Age-group, years.	Per cent. of population.		
	Progressive type.	Stationary type.	Retrogressive type.
0-14 ..	40	33	20
15-49 ..	50	50	50
50-onwards ..	10	17	30

immigration, and the *Secessive*, where it has

the population falls in the maturity period. The "type" of the population is to be determined by the fractions found in the other two periods. Sundbärg distinguishes on these lines three types: the *Progressive*, *Stationary*, and *Retrogressive*, as here shown. To these Whipple adds two more: the *Accessive*, where the population has gained by immigration: in these, the figure for the age group 15-49 will be more and less respectively than 50. A few examples of population classified on these lines are shown in the margin

Country or State.	Per cent. of population.			Type.
	0-14 years.	15-49 years.	50 years and over.	
Sweden (1751-1900).	33	50	17	Stationary
United States (1910)	32	54	15	Accessive.
Washington State, U. S. A.	26	61	13	Very accessive.
Maine, U. S. A. ..	27	51	22	Retrogressive.

I now show the population of

	Per cent. of population—United Provinces.		
	0-14 years.	15-49 years.	50 years and over.
Males	38	50	12
Females	37	50	13

selected as likely to have a fairly normal population: that is to say, which was

Per cent. of population.

0-14 years.	15-49 years.	50 years and over.
40	49	11

these provinces similarly classified. It will be seen to be markedly progressive in type—rather more so for men than for women, as one would expect. Perhaps however a safer judgment may be formed by treating in the same way the figures given in Subsidiary Table I. These figures show the age distribution by annual periods of 100,000 persons of each sex of each main religion (400,000 persons in all) taken from a tract which was believed to have been less seriously affected than the province as a whole by epidemics and famine. The tract so selected was a part of the Basti district. The classification of these 400,000 persons is here shown.

The selected population appears to be even more markedly progressive than the population of the whole province. It is also slightly secessive, for Basti loses appreciably by emigration.

5. To sum up: an examination of the available age statistics, whether those of the census or those collected by the Director of Public Health, on whatever lines it be attempted, points unmistakably to the same conclusion—that the population, though during the last twenty years it has seriously retrogressed, is essentially not retrogressive, but progressive; and that given immunity from overwhelming calamities, it will resume a normal process of expansion which has been accidentally checked since the beginning of this century.

General conclusions summarised.

*Comparative
"progressive-
ness" of main
Religions and
of Natural
Divisions.*

6. I will conclude this chapter by comparing the relative "Progressiveness" of the main Religions and of the Natural Divisions. For use in dealing with the Hindu and Muhammadan communities the figures of Subsidiary Table I are again more suitable than the figures for the whole province. For a comparison of the figures for the whole province would be vitiated by the fact that for the whole province the Muhammadans are town-dwellers to a far greater extent than the Hindus, and any difference revealed might well be due to habitat rather than to religion or racial origin: whereas Basti is almost wholly rural. The age classification by main religions of this selected population suggests

Community and sex				Per cent. of population.		
				6-14 years.	15-49 years.	50 years and over.
Hindu ..	{ Males ..			41	49	10
	{ Females ..			38	49	13
Muhammadan ..	{ Males ..			42	48	10
	{ Females ..			40	49	11

that the Muhammadans are slightly more progressive than the Hindus. Both communities are shown to be secessive to a small extent, as would be anticipated in Basti.

Natural division.				Per cent. of population.		
				0-14 years.	15-49 years.	50 years and over.
Himalaya West ..	{ Males ..			36	52	12
	{ Females ..			37	51	12
Sub-Himalaya West ..	{ Males ..			37	51	12
	{ Females ..			37	51	12
Western Plain ..	{ Males ..			37	51	12
	{ Females ..			38	50	12
Central Plain ..	{ Males ..			36	51	13
	{ Females ..			35	52	13
Central India Plateau ..	{ Males ..			40	50	10
	{ Females ..			39	50	12
East Satpuras ..	{ Males ..			40	50	10
	{ Females ..			39	50	11
Sub-Himalaya East ..	{ Males ..			39	50	11
	{ Females ..			38	50	12
Eastern Plain ..	{ Males ..			41	47	12
	{ Females ..			39	49	12

The classification of the Natural Divisions is shown in the margin. There is no division which is not progressive, but the east is markedly more progressive than the west. The indications are that the three eastern divisions will continue to outstrip the the three Western divisions in population; while the Plateau has also all the factors of increase. The Central Plain has the most unfavourable figures; the population here is more nearly stationary in type than elsewhere.

The statistics seem to show that migration is not of sufficient volume to affect the classification appreciably. Only in the Eastern Plain is emigration sufficient to give the population a slightly secessive appearance. The trifling accessiveness of the Central Plain is due probably to the concentration of labour in Cawnpore and of professional people and troops in Lucknow and Allahabad: that of the Western Plain and Sub-Himalaya West to the presence of garrisons and railway settlements at Meerut, Agra, Muttra, Bareilly, and Saharanpur; and that of Himalaya West to the large number of immigrants to be found in the districts of Naini Tal and Dehra Dun.

On the whole these figures are in accordance with known conditions; and if there is anything in Sundbärg's formula, they should give a reasonably reliable indication of what is to be expected of the population in the near future.

Progressiveness may also be gauged by the figures given in Subsidiary Table V. This table shows to be generally true of each division what has already

been deduced from the absolute figures as true of the whole province: that the conditions of the decade have differentiated against people of immediately reproductive age, and in favour of those who have not yet reached reproductive age. The number of children relatively to persons of reproductive age and to married females of reproductive age has increased, for the province, from 62 and 150 to 66 and 161 respectively: and in a greater or less degree in every division except Himalaya West. The proportion of persons above reproductive age to persons of reproductive age has increased (for the province from 12 and 14 to 13 and 15): and that of married females of reproductive age to all females has decreased (from 35 to 34). From the detailed figures of the table it would appear that population promises most future increase in the Eastern Plain, followed by East Satpuras and the Plateau, and as regards districts, in Azamgarh, Ballia, Benares, Mirzapur, Banda, Jhansi, and Muzaffarnagar: and least future increase in Himalaya West and the Central Plain.

It should be possible to deduce from the table a rough coefficient of fertility: by multiplying the figure in column 14 (proportion of married females of reproductive age to all females) by the figure in column 5 (proportion of children to married females of reproductive age). The co-efficient so calculated is shown for

Natural Division.	Coefficient of fertility.	
	1911.	1921.
Himalaya West	5,472	5,004
Sub-Himalaya West	5,495	5,406
Indo-Gangetic Plain West	5,495	5,644
Ditto Central	4,900	5,285
Central India Plateau	5,400	5,610
East Satpuras	5,236	5,511
Sub-Himalaya East	5,400	5,508
Indo-Gangetic Plain East	5,820	5,636
United Province:	5,250	5,474

Natural divisions in the margin. Unfortunately it is impossible, owing to the abnormal mortality of the decade, to test its value or to draw any conclusions from it. For normal periods it should be reliable.

Subsidiary Table I.—*Age distribution of 100,000 of each sex by annual periods.*

Age.	Males.		Females.		Age.	Males.		Females.	
	Hindus.	Muham- madans.	Hindus.	Muham- madans.		Hindus.	Muham- madans.	Hindus.	Muham- madans.
1	2	3	4	5	1	2	3	4	5
0	2,673	2,664	2,581	2,732	56	250	356	214	305
1	1,696	1,738	1,679	2,087	57	45	172	114	175
2	2,194	2,496	2,464	2,688	58	298	255	206	314
3	2,978	3,036	3,283	3,558	59	81	114	79	142
4	3,009	3,105	3,697	3,312	60	1,058	1,402	2,704	1,699
5	5,068	3,309	3,149	3,333	61	210	180	226	144
6	3,800	3,716	3,607	3,078	62	374	243	258	462
7	2,504	2,886	2,388	2,457	63	206	313	122	457
8	2,702	4,189	3,511	4,571	64	246	286	184	386
9	1,535	2,222	1,459	1,409	65	353	345	638	479
10	4,077	4,187	3,233	3,768	66	57	58	48	73
11	1,769	1,149	1,034	1,008	67	62	74	34	57
12	3,196	3,268	3,120	2,547	68	69	85	86	172
13	1,445	1,891	1,190	1,698	69	38	61	37	37
14	1,693	2,356	1,458	1,489	70	534	417	1,362	726
15	2,522	1,441	1,391	883	71	36	54	28	26
16	2,042	2,615	1,618	1,726	72	92	72	120	83
17	678	1,104	794	1,331	73	46	30	22	10
18	1,882	1,993	1,700	1,810	74	57	51	25	45
19	699	737	506	502	75	75	137	233	220
20	3,033	2,701	3,857	2,348	76	33	33	17	38
21	1,813	455	789	497	77	20	228	55	166
22	1,963	2,367	1,860	2,543	78	7	40	25	50
23	909	861	596	649	79	8	24	18	4
24	1,369	1,910	1,640	2,769	80	64	165	179	162
25	3,515	2,651	3,567	2,423	81	3	14	10	3
26	1,039	747	1,106	854	82	12	29	34	14
27	672	1,124	836	1,418	83	..	47	10	4
28	2,448	2,836	2,502	2,449	84	17	14	9	5
29	960	1,037	496	1,394	85	20	26	19	30
30	3,641	2,854	5,282	3,860	86	8	1	4	28
31	664	687	339	516	87	14	..	3	26
32	2,241	3,060	2,525	2,200	88	18	4	6	28
33	397	639	422	870	89	1	..	5	1
34	1,413	924	638	1,763	90	27	55	60	131
35	2,511	1,766	2,835	1,560	91	7	3	3	34
36	1,953	1,828	2,120	1,662	92	11	9	3	92
37	835	405	238	774	93	1	34	..	4
38	850	1,179	956	1,251	94	6	44	3	8
39	412	773	279	936	95	2	34	10	..
40	3,837	3,034	4,912	3,343	96	2	1	4	16
41	564	328	257	529	97	..	..	2	17
42	955	1,347	992	851	98	2	..	7	2
43	370	857	276	819	99	1	1	1	2
44	406	617	356	829	100	3	12	8	66
45	2,002	1,598	2,323	1,429	101	..	3	3	2
46	489	383	343	608	102	..	2	..	4
47	180	455	131	390	103	..	..	..	..
48	856	721	671	731	104	..	..	1	7
49	147	280	179	367	105	..	1	..	1
50	2,320	1,920	3,103	1,981	106	..	..	..	..
51	277	185	151	310	107	..	..	..	..
52	678	607	737	603	108	..	..	..	..
53	288	414	97	539	109	1	..	..	..
54	370	576	208	394	110	..	1	..	1
55	1,081	726	1,244	823	111	..	..	1	..

Subsidiary Table II.—*Age distribution of 10,000 of each sex in the province and each natural division.*

Age.	1921.		1911.		1901.		1891.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
0	300	312	320	336	304	314	342	359
1	129	144	143	159	172	188	148	165
2	211	244	212	238	275	297	247	281
3	250	298	245	279	244	266	294	335
4	260	285	240	254	233	245		296
0-5	1,150	1,283	1,160	1,266	1,228	1,310	1,308	1,436
5-10	1,407	1,405	1,339	1,325	1,298	1,263	1,328	1,290
10-15	1,219	1,018	1,226	1,028	1,256	1,073	166	941
15-20	858	748	859	758	863	764	838	732
20-25	820	882	868	927	829	885	858	899
25-30	861	874	898	913	885	896	867	895
30-35	830	863	849	885	869	881	892	910
35-40	607	594	597	588	562	563	564	544
40-45	665	691	692	711	689	719	703	722
45-50	409	384	382	362	373	357	341	321
50-55	484	494	478	502	483	510	483	517
55-60	186	179	168	162	173	173	152	150
60-65	274	317	275	327				
65-70	77	79	66	66				
70 and over ..	153	189	143	180				
Total 60 and over ..	504	585	484	573	482	598	500	643
Unspecified ..								
Mean age	25 years 3 months	25 years 7-7 months	25 years 08 months	25 years 8-1 months	24 years 4 months	25 years 6-7 months	24 years 3-1 months	25 years 5-4 months
<i>Natural divisions,</i>								
<i>Himalaya, West.</i>								
0-5	1,105	1,229	1,267	1,430	1,235	1,384	1,291	1,469
5-10	1,252	1,284	1,236	1,302	1,127	1,199	1,226	1,301
10-15	1,224	1,142	1,117	1,078	1,205	1,115	1,133	1,052
15-20	998	966	878	819	989	953	953	918
20-40	3,135	3,120	3,334	3,193	3,348	3,236	3,329	3,123
40-60	1,787	1,710	1,711	1,629	1,669	1,609	1,615	1,576
60 and over ..	499	549	457	521	422	499	453	561
Unspecified ..								
<i>Sub-Himalaya, West</i>								
0-5	1,105	1,261	1,181	1,302	1,272	1,418	1,358	1,527
5-10	1,337	1,376	1,295	1,332	1,234	1,241	1,228	1,289
10-15	1,250	1,065	1,197	1,022	1,188	1,062	1,140	929
15-20	921	828	889	803	906	793	882	830
20-40	3,140	3,165	3,233	3,205	3,203	3,155	3,197	3,151
40-60	1,752	1,744	1,719	1,709	1,711	1,744	1,643	1,688
60 and over ..	495	561	486	567	482	589	501	641
Unspecified ..								
<i>Indo-Gangetic Plain,</i>								
<i>West.</i>								
0-5	1,127	1,302	1,093	1,243	1,275	1,407	1,205	1,367
5-10	1,365	1,437	1,316	1,365	1,319	1,322	1,201	1,207
10-15	1,218	1,016	1,301	1,118	1,149	983	1,145	899
15-20	924	855	931	875	829	761	957	871
20-40	3,183	3,124	3,073	3,097	3,156	3,169	3,344	3,368
40-60	1,720	1,727	1,795	1,774	1,789	1,796	1,693	1,731
60 and over ..	513	539	491		476	552	455	567
Unspecified ..					7	10		
<i>Indo-Gangetic Plain,</i>								
<i>Central</i>								
0-5	1,101	1,224	1,086	1,161	1,168	1,238	1,302	1,410
5-10	1,351	1,336	1,305	1,295	1,284	1,235	1,325	1,281
10-15	1,167	965	1,180	995	1,251	1,068	1,121	911
15-20	834	712	854	740	849	767	792	686
20-40	3,177	3,308	3,270	3,406	3,116	3,242	3,188	3,246
40-60	1,840	1,843	1,795	1,811	1,798	1,809	1,767	1,780
60 and over ..	540	612	510	592	534	649	565	686
Unspecified ..					2			
<i>Central India Plateau</i>								
0-5	1,185	1,245	1,352	1,384	1,123	1,150	1,217	1,293
5-10	1,511	1,475	1,274	1,231	1,209	1,192	1,421	1,398
10-15	1,285	1,085	1,120	919	1,411	1,151	1,271	1,018
15-20	825	735	851	738	977	863	812	701
20-40	3,142	3,158	3,493	3,472	3,312	3,312	3,289	3,294
40-60	1,671	1,740	1,558	1,755	1,649	1,836	1,666	1,728
60 and over ..	381	555	352	500	318	494	374	568
Unspecified ..					1			

Subsidiary Table II.—*Age distribution of 10,000 of each sex in the province and each natural division—(concluded).*

Age.	1921.		1911.		1901.		1891.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
<i>East Salpuras.</i>								
0—5 ..	1,280	1,331	1,292	1,348	1,193	1,218	1,284	1,371
5—10 ..	1,497	1,442	1,460	1,378	1,336	1,265	1,514	1,399
10—15 ..	1,264	1,068	1,203	990	1,412	1,125	1,302	1,042
15—20 ..	808	708	806	676	907	774	765	648
20—40 ..	3,075	3,279	3,300	3,419	3,189	3,374	3,072	3,208
40—60 ..	1,636	1,625	1,517	1,615	1,534	1,670	1,602	1,637
60 and over	450	547	422	579	410	567	431	606
Unspecified	..	..	..	..	9	7	..	..
<i>Sub-Himalaya, East.</i>								
0—5 ..	1,206	1,320	1,248	1,381	1,264	1,332	1,479	1,606
5—10 ..	1,490	1,416	1,414	1,336	1,325	1,279	1,447	1,365
10—15 ..	1,264	1,028	1,243	1,014	1,367	1,158	1,173	949
15—20 ..	795	629	788	641	870	717	725	605
20—40 ..	3,142	3,290	3,261	3,423	3,164	3,236	3,127	3,198
40—60 ..	1,655	1,695	1,597	1,639	1,558	1,643	1,567	1,591
60 and over	458	622	449	616	443	621	482	686
Unspecified	..	..	..	..	9	14	..	..
<i>Indo-Gangetic Plain, East.</i>								
0—5 ..	1,255	1,364	1,232	1,286	1,213	1,217	1,347	1,433
5—10 ..	1,579	1,505	1,449	1,324	1,367	1,237	1,486	1,343
10—15 ..	1,253	1,011	1,220	963	1,378	1,128	1,258	1,007
15—20 ..	770	642	768	650	853	738	740	642
20—40 ..	2,884	3,160	3,176	3,404	2,988	3,275	2,944	3,175
40—60 ..	1,744	1,704	1,632	1,685	1,674	1,754	1,680	1,709
60 and over	535	614	523	628	512	634	545	691
Unspecified	..	..	..	..	15	17	..	..

Subsidiary Table III.—*Age distribution of 10,000 of each sex in each main religion.*

Age.	1921.		1911.		1901.		1891.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9
HINDU.								
0—5 ..	1,145	1,275	1,153	1,255	1,221	1,305	1,305	1,494
5—10 ..	1,405	1,396	1,336	1,320	1,295	1,260	1,329	1,291
10—15 ..	1,210	1,010	1,223	1,022	1,255	1,071	1,166	941
15—20 ..	858	743	860	751	857	700	837	726
20—40 ..	3,135	3,225	3,228	3,331	3,165	4,241	3,192	3,259
40—60 ..	1,764	1,765	1,729	1,749	1,728	1,768	1,682	1,711
60 and over	493	585	471	572	469	595	489	636
Mean age	25 years 2·6 months	25 years 9·0 months	25 years 2·1 months	25 years 9·4 months	24 years 13·4 months	25 years 7·5 months	..	..
MUHAMMADAN.								
0—5 ..	1,185	1,387	1,218	1,334	1,284	1,352	1,341	1,453
5—10 ..	1,429	1,457	1,371	1,306	1,332	1,292	1,333	1,287
10—15 ..	1,276	1,066	1,248	1,056	1,275	1,091	1,173	941
15—20 ..	855	709	850	777	847	785	837	751
20—40 ..	2,991	3,134	3,073	3,211	3,010	3,139	3,076	3,188
40—60 ..	1,696	1,660	1,681	1,666	1,691	1,718	1,667	1,702
60 and over	568	577	564	590	561	623	570	670
Mean age	25 years 2·1 months	25 years 0·5 month	25 years 2·3 months	25 years 8·1 months	24 years 9·9 months	25 years 8·6 months	..	..

Subsidiary Table IV.—*Age distribution of 1,000 of each sex in certain castes.*

Caste.	Males. Number per mille, age—							Females. Number per mille, age—						
	0-5	5-12	12-15	15-20	20-40	40 and over.	0-5	5-12	12-15	15-20	20-40	40 and over.		
	1	2	3	4	5	6	7	8	9	10	11	12	13	
1. Brahman ..	111	163	77	90	309	250	117	161	67	77	312	263		
2. Rajput ..	109	168	78	99	302	244	117	167	68	87	309	252		
3. Sonar ..	112	170	77	99	319	223	134	183	69	90	300	224		
4. Shaikh ..	117	182	79	88	300	234	133	184	68	81	310	224		
5. Kayasth ..	106	166	76	97	313	252	124	170	69	87	297	253		
6. Chamar ..	130	201	81	86	296	206	141	185	71	81	309	213		
7. Kahar ..	124	191	79	93	289	224	148	172	67	84	301	225		
8. Pathan ..	114	188	76	87	293	242	127	181	66	80	293	251		
9. Gadariya ..	115	186	82	101	297	219	133	183	75	92	295	222		
10. Kumhar ..	121	191	79	96	294	219	136	186	72	87	299	220		
11. Dhobi ..	121	193	79	92	301	214	137	185	68	86	303	217		
12. Lohar ..	116	179	80	97	299	229	137	180	73	85	298	227		
13. Nai ..	119	184	79	93	308	217	134	179	68	85	309	226		
14. Saiyid ..	114	182	78	89	286	251	124	176	68	89	293	247		
15. Barhai ..	112	175	78	96	305	234	131	175	67	90	304	233		
16. Julaha ..	128	205	76	83	288	220	145	195	68	78	300	214		
17. Teli ..	120	186	80	93	306	215	137	181	70	87	306	219		
18. Lodha ..	117	183	78	95	312	215	136	179	67	85	312	221		
19. Bharbhunja ..	113	171	80	95	309	232	133	177	73	88	303	226		
20. Kalwar ..	117	171	77	91	301	243	131	169	70	80	303	244		
21. Bhangi ..	123	197	85	100	288	207	135	190	73	99	302	201		
22. Agarwal ..	110	159	74	98	320	245	129	177	68	94	297	233		
23. Pasi ..	125	186	78	81	304	223	138	177	76	86	311	218		
24. Ahir ..	116	185	83	90	304	222	131	178	81	77	303	230		
25. Luniya ..	134	197	82	93	287	204	147	189	70	80	296	218		
26. Kachhi ..	117	183	76	90	314	220	137	178	70	86	301	228		
27. Kurmi ..	107	172	79	88	320	234	123	166	72	79	314	246		
28. Gujar ..	113	179	80	110	299	219	127	177	65	95	306	230		
29. Jat ..	122	171	78	110	295	224	135	172	67	99	297	230		
30. Bhuinhar ..	102	179	79	97	304	239	110	174	60	71	319	265		
31. Koeri ..	121	190	81	85	300	223	131	180	70	77	302	237		
32. Anglo-Indian ..	107	174	114	138	274	193	101	159	71	125	336	208		
33. Indian Christian ..	132	189	85	98	293	203	138	192	68	89	311	202		

Subsidiary Table IVA.—*Proportion of children under 12 and of persons over 40 to those aged 15—40 in certain castes; also of married females aged 15—40 per 100 females.*

Caste.	Proportion of children under 12, both sexes, per 100—		Proportion of persons over 40 per 100 aged 15—40.		Number of married females aged 15—40 per 100 females of all ages.
	Persons aged 15—40	Married females aged 15—40.	Males.	Female.	
	2	3	4	5	
1. Brahman	70	192	63	69	31
2. Rajput	70	187	61	64	32
3. Sonar	73	206	53	58	31
4. Shaikh	79	200	60	57	32
5. Kayasth	69	202	61	66	29
6. Chamar	82	172	54	51	34
7. Kahar	84	205	59	58	33
8. Pathan	81	205	64	67	31
9. Gadariya	78	198	55	58	33
10. Kumhar	82	198	56	57	33
11. Dhobi	81	198	54	55	33
12. Lohar	78	191	58	59	33
13. Nai	77	192	55	57	33
14. Saiyid	79	202	67	64	31
15. Barhai	75	190	58	66	33
16. Julaha	90	208	59	57	34
17. Teli	79	195	54	50	34
18. Lodha	76	190	53	56	34
19. Bharbhunj	74	196	57	58	33
20. Kalwar	75	191	62	64	32
21. Bhangi	82	203	54	50	33
22. Agarwal	79	208	58	59	30
23. Pasi	80	191	57	56	34
24. Ahir	78	197	56	60	33
25. Luniya	88	213	53	58	31
26. Kachhi	77	199	54	59	33
27. Kurmi	71	182	57	63	33
28. Gujar	73	199	53	57	34
29. Jat	75	211	55	58	33
30. Bhuinhar	71	192	60	67	30
31. Koeri	82	200	58	62	32
32. Anglo-Indian	62	215	47	45	25
33. Indian Christian	82	204	52	50	33

Subsidiary Table V.—*Proportion of children under 10 and of persons over 60 to those aged 15 to 40; also of married females aged 15 to 40 to females of all ages.*

District and natural divisions.	Percentage of children, both sexes, to—						Percentage of persons aged 60 and over to persons aged 15 to 40						Percentage of married females aged 15 to 40 to females of all ages.		
	Persons aged 15 to 40.			Married females aged 15 to 40.			1921.		1911.		1901.				
	1921.	1911.	1901.	1921.	1911.	1901.	Males.	Females.	Males.	Females.	Males.	Females.	1921.	1911.	1901.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
United Provinces ..	66	62	63	161	150	152	13	15	12	14	12	15	34	35	34
Himalaya, West ..	59	63	58	139	152	140	12	13	11	13	10	12	36	36	37
Dehra Dun ..	42	48	52	139	145	148	10	13	10	13	10	10	36	37	37
Naini Tal ..	45	53	46	135	161	152	7	9	7	10	6	9	37	38	38
Almora ..	71	73	68	152	148	128	17	14	15	14	14	14	36	36	36
Garhwal ..	65	68	58	137	148	134	13	14	10	14	8	12	36	36	36
Tehri Garhwal State ..	59	..	..	127	..	..	11	15	..	..	..	..	37	..	..
Sub-Himalaya, West ..	63	63	61	159	157	160	12	14	12	14	12	15	31	35	34
Saharanpur ..	51	58	63	132	150	159	13	12	11	11	12	13	35	36	35
Bareilly ..	63	64	65	157	139	161	12	15	12	15	11	15	35	36	35
Bijnor ..	67	66	62	161	157	155	13	14	13	14	13	17	35	36	34
Pilibhit ..	65	67	64	164	167	158	9	15	10	15	9	14	34	35	35
Kheri ..	62	63	65	161	158	167	13	16	12	16	12	14	33	35	33
Rampur State ..	59	..	..	146	..	..	11	13	..	..	..	..	36	..	..
Indo-Gangetic Plain, West ..	65	63	67	166	157	166	13	14	12	13	12	14	34	35	34
Muzaffarnagar ..	68	63	68	176	160	166	13	12	12	11	12	13	34	36	35
Meerut ..	66	61	65	167	149	155	14	15	14	14	13	14	34	36	36
Bulandshahr ..	67	64	75	158	151	175	13	13	13	13	13	14	36	35	35
Aligarh ..	63	63	73	160	158	173	12	13	13	14	13	14	35	34	34
Muttra ..	64	50	65	181	146	166	12	14	12	13	12	15	32	35	34
Agra ..	62	59	65	162	150	165	12	13	13	13	12	14	35	35	33
Mainpuri ..	61	60	66	160	154	163	10	11	9	10	9	10	36	35	36
Etah ..	65	67	69	172	168	183	12	14	12	13	10	13	33	34	33
Budaun ..	65	66	67	164	165	170	13	15	14	16	16	18	34	34	33
Moradabad ..	68	69	65	165	165	155	15	15	14	15	13	17	34	35	35
Shahjahanpur ..	66	65	65	169	164	163	13	17	12	16	12	16	33	34	34
Farrukhabad ..	61	61	64	163	158	175	12	13	10	12	12	12	35	34	32
Etawah ..	62	58	62	162	153	160	10	10	8	10	9	10	36	36	36
Indo-Gangetic Plain, Central.	62	59	62	151	140	145	13	15	12	14	13	16	35	35	35
Cawnpore ..	57	52	55	152	133	138	11	12	10	11	10	12	35	34	36
Fatehpur ..	62	58	57	151	138	133	12	11	11	10	11	11	35	37	37
Allahabad ..	65	61	58	158	143	135	12	14	10	12	11	11	34	36	35
Lucknow ..	59	54	63	154	137	152	16	18	14	16	17	19	34	36	34
Unao ..	65	58	63	163	144	149	14	14	13	14	18	16	33	35	33
Rae Bareilly ..	59	57	59	136	129	137	13	15	13	16	12	18	36	36	34
Sitapur ..	63	59	66	169	145	161	14	16	12	14	14	17	34	36	35
Hardoi ..	67	62	67	170	156	164	13	14	11	13	12	14	34	36	34
Fyzabad ..	66	63	60	149	142	137	15	18	15	18	15	18	35	35	35
Sultanpur ..	61	58	65	137	128	143	15	17	14	17	14	19	35	37	35
Partabgarh ..	63	62	63	138	134	139	12	15	11	14	14	16	35	37	35
Bara Banki ..	61	56	66	147	135	152	17	18	15	16	16	20	35	36	34
Central India Plateau ..	69	61	55	170	150	137	10	14	8	12	7	12	33	36	31
Jhansi ..	71	62	54	174	152	133	9	15	8	12	7	12	34	37	35
Jalaun ..	67	58	56	166	144	141	8	12	7	11	7	11	34	36	36
Hamirpur ..	65	61	58	157	146	145	10	15	9	13	8	13	33	36	33
Banda ..	71	62	54	177	154	133	10	14	8	12	8	12	31	35	34
East Satpuras ..	71	67	61	167	154	142	12	14	10	14	10	14	33	34	34
Mirzapur ..	71	67	61	170	151	142	11	14	10	14	10	14	33	34	34
Benares State ..	69	..	..	163	..	..	13	14	..	..	..	..	23	..	..
Sub-Himalaya, East ..	69	65	65	162	150	155	12	16	12	15	11	16	34	36	34
Gorakhpur ..	72	70	65	167	159	158	11	15	11	15	11	15	34	35	33
Basti ..	70	65	67	163	148	157	11	16	11	16	10	16	35	36	34
Gonda ..	66	62	61	156	142	144	12	17	11	16	11	15	34	36	35
Behranch ..	62	59	66	151	139	154	13	17	11	14	13	17	35	34	35
Indo-Gangetic Plain, East ..	77	65	64	178	152	146	15	16	13	15	13	15	32	35	34
Benares ..	72	66	60	175	155	144	15	17	14	16	13	17	32	34	34
Jaunpur ..	74	64	65	167	144	146	16	15	13	15	13	15	33	35	34
Ghazipur ..	79	66	61	162	155	145	15	17	13	16	13	17	32	34	34
Ballia ..	75	67	63	182	159	147	15	18	13	16	14	18	32	34	34
Azamgarh ..	81	65	64	183	152	146	14	15	13	14	12	13	33	35	34

Subsidiary Table V(A).—*Proportion in certain religions of children under 10 and of persons over 60 to those aged 15 to 40, and of married females aged 15 to 40 to females of all ages.*

Natural division.	Percentage of children, both sexes, to						Percentage of persons aged 60 and over to persons aged 15 to 40 in						Percentage of married females aged 15 to 40 to females of all ages.		
	Persons aged 1 to 40.			Married females aged 15 to 40			All religions.		Hindus.						
	All relig- ions.	Hindus.	Muham- madans.	All relig- ions.	Hindus.	Muham- madans.									
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
United Provinces ..	66	66	70	161	160	166	13	15	12	15	15	15	34	34	34
Himalaya, West ..	59	60	44	139	139	139	12	13	12	14	9	9	36	36	37
Sub-Himalaya, West ..	63	62	66	159	158	162	12	14	12	14	13	13	34	34	34
Indo-Gangetic Plain, West ..	65	65	68	166	165	168	13	14	12	14	15	14	34	35	34
Indo-Gangetic Plain, Central.	62	61	67	151	150	159	13	15	13	15	17	17	34	34	34
Central India Plateau ..	69	69	65	170	170	163	10	14	10	14	11	16	33	33	33
East Satpuras ..	71	71	74	167	166	178	12	14	11	14	14	16	33	33	32
Sub-Himalaya, East ..	69	68	76	162	160	171	12	16	11	16	13	15	34	34	35
Indo-Gangetic Plain, East	77	75	86	178	178	183	15	16	14	16	19	16	32	32	33

Subsidiary Table VI.—*Variation in population at certain age periods.*

Variation per cent. in population (Increase + Decrease -).

Natural division.	Period	All ages	10—15.	15—40	40—60.	60 and
United Provinces	1891—1901	+1·68	+3·22	+12·21	+1·62	+4·45
	1901—1911	.. -1·07	-1·28	4·12	+7·71	+1·74
	1911—1921	.. -3·13	-0·30	-3·70	-5·54	-2·13
Himalaya, West	1891—1901	.. +2·63	+2·95	+8·10	+5·06	+5·47
	1901—1911	.. +1·73	+17·21	+4·41	+7·24	+12·85
	1911—1921	.. -0·63	-7·45	+0·57	-0·85	+4·16
Sub-Himalaya, West	1891—1901	.. +1·56	-1·84	+9·68	+7·89	+5·47
	1901—1911	.. +1·10	+7·96	-7·07	+1·91	+7·36
	1911—1921	.. -7·71	-9·83	-2·88	-8·16	-6·09
Indo-Gangetic Plain, West	1891—1901	.. +1·09	+17·94	+14·39	+1·94	+15·24
	1901—1911	.. +2·01	-7·78	+11·35	-1·20	-2·33
	1911—1921	.. -5·75	-1·82	-12·94	-5·08	-8·77
Indo-Gangetic Plain, Central.	1891—1901	.. +1·28	-6·22	+15·75	+2·59	+3·26
	1901—1911	.. -3·74	-5·25	-9·59	-7·06	+3·76
	1911—1921	.. -4·06	-0·83	-6·33	-6·82	-2·01
Central India Plateau	1891—1901	.. -8·37	-16·11	+2·36	-3·64	-6·00
	1901—1911	.. +4·84	+17·57	-16·18	+5·93	-7·31
	1911—1921	.. -6·46	-3·35	+8·80	-14·60	-3·47
East Satpuras	1891—1901	.. -6·81	-16·13	+1·65	-7·76	-8·57
	1901—1911	.. -1·05	+8·08	-14·31	-1·71	-3·31
	1911—1921	.. +1·49	+3·04	+7·67	-2·75	-5·71
Sub-Himalaya, East	1891—1901	.. -7·14	-11·58	+19·05	+4·39	+15·95
	1901—1911	.. +3·22	+5·79	-7·61	+4·85	+4·35
	1911—1921	.. +3·19	+5·19	+4·41	-0·06	+6·76
Indo-Gangetic Plain, East	1891—1901	.. -2·97	-16·02	+2·69	-2·67	+6·89
	1901—1911	.. -5·17	-27	-17·21	-2·75	+8·98
	1911—1921	.. +0·33	+8·14	+4·23	-7·20	+3·64

Subsidiary Table VII.—*Reported birth-rate by sex and natural divisions. (British districts.)*

Year.	Number of births per 1,000 of total population. (Census of 1911 adjusted for subsequent territorial changes).															
	Province.		Himalaya, West.		Sub-Himalaya, West.		Indo-Gangetic Plain, West.		Central India Plateau.		East Satpuras.		Sub-Himalaya, East.		Indo-Gangetic Plain, East.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1911	22.8	21.0	18.1	17.2	23.8	22.0	22.2	20.5	23.3	21.5	24.5	22.9	22.7	20.8	22.5	20.7
1912	23.0	21.8	19.4	18.6	25.5	23.3	24.2	22.2	24.1	21.3	24.0	21.3	23.0	21.8	23.5	21.7
1913	24.8	22.9	21.4	20.6	26.6	24.5	25.0	22.9	25.2	23.3	27.0	23.9	23.8	22.1	23.6	21.9
1914	23.4	21.6	18.7	17.9	23.8	22.0	23.4	22.9	23.7	21.7	26.9	24.1	22.7	20.3	22.2	20.6
1915	22.7	20.8	18.5	17.7	23.2	21.3	23.4	21.4	23.0	21.1	22.3	22.6	21.0	20.4	21.6	20.0
1916	23.4	20.7	18.3	17.5	23.7	21.6	24.6	22.5	23.5	20.2	26.9	24.8	21.5	18.2	20.8	19.1
1917	24.0	22.1	15.8	15.0	23.9	22.0	25.1	22.9	24.6	22.8	25.5	23.4	21.8	20.3	21.4	20.7
1918	20.9	19.0	18.1	17.3	21.4	19.4	20.7	18.6	21.2	19.3	23.1	22.5	21.2	18.7	20.6	19.1
1919	17.0	15.4	16.4	15.5	18.0	16.5	18.5	16.4	16.3	14.8	17.6	16.2	15.4	18.9	16.6	15.2
1920	18.6	16.9	17.2	16.2	20.6	18.8	19.9	17.9	18.3	16.6	15.3	15.4	14.4	16.5	17.5	16.1
1911-1920	22.0	20.2	18.2	17.3	23.0	21.1	22.7	20.8	22.0	20.2	23.4	21.9	20.5	19.4	21.2	19.6

NOTE.—These proportions have been worked out, as in 1911, on total population, not on sex population.

Subsidiary Table VIII.—*Reported death-rate by sex and natural division.. (British districts.)*

Year.	Number of deaths per 1,000 of total population. (Census of 1911 adjusted for subsequent territorial changes).																	
	Province.		Himalaya, West.		Sub-Himalaya, West.		Indo-Gangetic Plain, West.		Indo-Gangetic Plain, Central.		Central India Plateau.		East Satpura.		Sub-Himalaya, East.		Indo-Gangetic Plain, East.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1911	44.2	45.7	32.1	38.6	45.7	40.7	45.7	51.8	48.5	40.9	37.8	42.5	41.3	35.9	33.2	40.5	51.1	
1912	30.0	29.9	26.2	27.8	29.2	28.2	30.3	30.3	28.3	36.6	35.3	29.0	25.0	29.2	27.0	36.0	36.7	
1913	35.1	34.6	27.2	27.8	34.8	36.1	34.7	26.8	25.1	30.4	34.8	28.8	24.5	30.6	29.2	32.8	32.0	
1914	33.4	33.6	30.3	31.4	40.0	42.9	33.1	35.0	34.7	36.6	35.4	28.8	26.4	25.5	23.9	34.8	34.0	
1915	30.0	30.2	34.5	38.8	40.7	43.0	38.0	28.0	30.4	26.6	26.1	19.6	27.2	26.4	24.9	33.5	31.9	
1916	39.4	39.6	32.6	33.8	39.0	40.3	30.2	30.2	27.5	37.9	36.0	31.0	27.7	26.8	25.8	26.2	27.2	
1917	38.2	37.6	29.2	30.6	50.8	48.3	41.3	41.3	36.4	39.0	37.0	32.1	29.1	29.5	29.2	37.9	39.2	
1918	82.0	82.7	48.8	53.0	97.2	97.5	103.4	96.8	86.8	84.6	83.6	72.7	69.0	56.5	61.2	75.1	74.0	
1919	41.6	41.8	35.4	37.4	37.8	39.0	35.3	38.5	47.1	45.5	43.8	47.4	45.4	47.5	43.3	39.5	37.9	
1920	37.4	37.1	36.2	39.4	49.4	51.5	36.0	38.7	37.8	33.3	33.4	33.1	30.8	32.5	29.1	35.2	33.5	
1911-1920	40.1	40.3	33.0	35.2	45.0	45.7	41.3	43.8	41.6	42.0	41.6	37.4	34.7	34.1	31.8	40.2	39.8	

Subsidiary Table 1A.—*Reported death-rate by sex in decade, and in selected years, per mille living at same age according to census of 1911 (adjusted for transfers to Benares State and Delhi).*

Age.	Average of decade.				1911		1913.		1916.		1918.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11		
All ages	40.1	40.3	44.2	45.7	35.1	34.6	29.4	29.6	83.0	83.7		
Under 1 year	310.7	284.0	347.1	312.3	351.0	315.8	286.7	263.7	384.3	363.0		
1-5	78.4	75.9	71.3	70.8	68.7	65.5	65.8	64.6	133.8	127.4		
5-10	17.3	17.4	22.3	24.0	12.3	12.5	10.8	10.5	38.2	38.5		
10-15	13.1	14.8	18.0	21.9	10.2	11.4	7.3	8.2	32.3	35.8		
15-20	16.6	20.3	20.1	25.8	11.8	14.5	8.3	10.9	50.1	57.2		
20-30	21.4	23.4	23.1	26.7	15.2	16.7	11.0	12.3	66.6	71.8		
30-40	24.5	24.0	27.1	28.5	17.6	17.4	13.8	13.4	70.1	71.9		
40-50	32.3	28.9	36.8	35.8	24.9	21.9	20.3	17.8	81.6	74.1		
50-60	49.8	44.4	57.4	52.6	40.3	34.7	34.5	31.1	103.1	98.1		
60 and over	87.1	75.2	94.6	84.8	75.3	63.7	68.9	59.8	154.7	133.2		

Subsidiary Table X.—*Reported deaths from certain diseases per mille of each sex.*

Year.	United Provinces (British districts).											
	Fever.				Plague				Cholera.			
	Actual number of deaths.				Actual number of deaths.				Actual number of deaths.			
	Total.	Males.	Females.	Ratio per mille of each sex.	Total.	Males.	Females.	Ratio per mille of each sex.	Total.	Males.	Females.	Ratio per mille of each sex.
1911	1,308,498	683,840	624,658	29.0	332,301	149,909	182,392	6.1	117,689	60,380	57,309	2.5
1912	967,500	510,689	456,801	20.9	114,045	51,078	62,967	2.1	18,894	9,777	9,117	.4
1913	1,118,455	590,491	527,964	24.1	167,083	49,063	58,850	2.0	60,427	31,211	29,216	1.3
1914	1,050,506	548,285	502,221	22.4	103,954	47,446	56,508	1.9	32,408	16,706	15,702	.7
1915	937,999	500,759	437,240	20.5	58,728	25,874	32,854	1.1	90,508	44,753	45,755	1.8
1916	997,496	520,303	477,193	21.3	49,378	21,801	27,577	.9	33,300	16,849	16,451	.7
1917	1,266,519	675,824	590,695	27.6	149,084	56,663	72,421	2.3	21,440	10,818	10,622	.5
1918	3,217,078	1,682,649	1,534,429	68.8	174,805	79,861	94,944	3.3	119,746	61,255	58,521	2.6
1919	1,573,632	800,616	773,016	31.0	17,340	7,601	9,739	.3	81,865	42,060	39,805	1.7
1920	1,442,376	755,494	686,882	30.0	24,872	10,946	13,926	.5	6,952	3,739	3,213	.1
1911-1920	13,901,959	7,289,960	6,611,999	29.8	1,112,380	500,182	612,198	2.0	582,819	297,518	285,301	1.2
				29.6				2.6				1.3

Chapter VI.—SEX.

The proportion of females to males continues to fall. There are now 909 women to every 1,000 men in the province. In 1911 there were 915, and in 1901 there were 937. The figures for the two previous decades were 930 and 925. So that twenty years favourable to men relatively to women appear to have followed twenty years favourable to women relatively to men. The present fall is however wholly different in character from that revealed by last census. In 1911 the decrease of women was spread over the whole province. In 1921 women are found to have increased in the West, where they have always been in the greater defect, and to have decreased in the East, where their numbers have always approximated more nearly to those of men. Of the Natural Divisions (excluding states), Himalaya West and Sub-Himalaya West have each, relatively to 1,000 men, 9 more women than in 1911, and Indo-Gangetic Plain West has 3. On the other hand, Indo-Gangetic Plain Central has 12 less, Central India Plateau has 23 less, East Satpuras and Sub-Himalaya East each have 17 less, and Indo-Gangetic Plain East 21 less. The last named loses most as in 1911. Put broadly, the tendency to lose women continues markedly in the East, while in the West it has been checked. And the proportion between the sexes is more nearly level throughout the province than it has been during the present century, though for the whole province it is further from parity than it has ever been before.

The sex proportion as revealed by the statistics.

2. Before drawing inferences from these figures it is necessary to say a word about their accuracy. Indian sex figures have always been suspect: whether justly or not as regards this province, was very fully discussed in the last report. It is unnecessary to go over the ground again. The charge of inaccuracy was finally disproved in 1911, and the conditions of enumeration were the same then as now. The suspicion alluded to is due of course to the *parda* system, which is supposed to lead to the concealment and omission of women.

The accuracy of the statistics.

Caste.	Proportion of women to 1,000 men.	<i>Parda</i> system observed or not.
Nai ..	914	Never observed.
Sayed ..	938	Always observed.
Bhangi ..	918	Never observed.
Kachhi ..	878	Never observed.
Gadaria ..	891	Never observed.
Bhainhar ..	954	Always observed.

The figures in the margin are therefore relevant. Again, if the sex figures were affected to any appreciable extent by omissions of women, the proportion of women to men would not have been found to have fallen in the last twenty years: for every census cannot but be more thorough than that which preceded it. The statistics may safely be accepted as accurate.

3. There is no doubt that in this province, as in all countries, more males are born than females. The extent of the preponderance cannot be known exactly: according to the published vital statistics however the figures are as in the margin, and while these statistics cannot be accepted as strictly accurate, in this matter of proportion they are probably near the truth. Subsidiary Table II shows that at age 0-1 there are 944 females to 1,000 males and that the proportion increases until age 3-4 is reached, when it stands at 1,083. As I have said in the last chapter, these infancy figures have been vitiated by the use in the schedule of the word *bachha* to mean age 0-1; but admitting them to be so vitiated, they can only point to a preponderance of male births followed by a higher male than female mortality among infants to the end of their fourth year. Each succeeding census has indicated the same thing.

The disproportion of the sexes analysed.

Year.	Births.
1911 ..	1,084
1912 ..	1,084
1913 ..	1,082
1914 ..	1,084
1915 ..	1,038
1916 ..	1,086
1917 ..	1,084
1918 ..	1,097
1919 ..	1,104
1920 ..	1,101

Number of males born to every 1,000 females.

The reasons for this preponderance of male births is a question that has exercised the inquisitive of all countries, and every *savant* has his own theory. It is offset everywhere by the greater constitutional delicacy of male infants, and all that can be said is that this is nature's prodigal method of doing business. The herring lays a million eggs, and the tigress gives birth to two cubs: nature adjusts the quantity of offspring to its chance of survival. The additional male

births would, it may be supposed, given that nature be left alone, compensate for the comparative weakness of male infants and produce an equilibrium of the sexes.

Here that equilibrium is reached very quickly—somewhere between the completion of the first and second year. Females then gain progressively on males till the end of the fourth year; between the fourth and fifth males retake the lead which they do not lose till the sixtieth year is passed. A glance at Subsidiary Table II will show that these phenomena are more or less the same

Country.	Age period.	Ratio.	Age period.	Ratio.	Age period.	Ratio.	Age period.	Ratio.
England and Wales	0—1	125	1—5	105	5—15	99	55—65	131
Scotland	..	126	..	106	..	96	..	124
Ireland	..	125	..	99	..	81	..	101
France	..	122	..	103	..	90	..	156
Denmark	..	126	..	111	..	96	..	133
Sweden	..	125	..	106	..	98	..	125
Netherlands	..	123	..	105	..	103	..	118
Norway	..	122	..	110	..	94	..	17
Italy	..	111	..	99	..	90	..	114

in every decade. In countries where the vital statistics are above suspicion it can be shown in another way that the same age periods are favourable or unfavourable to the same sexes. In the margin will be found the ratios of male to female deaths in some of

the principal European countries in the years 1910—1912. The difference between what happens in these European countries, and what happens in this province, is one of degree only. The general tendencies in both are the same—a comparative excess of male births, an excess of male deaths in infancy, and of female deaths in childhood; while women live longer than men once old age is reached. But these similar tendencies differ so greatly in degree that they result in a large surplus at all ages of women in Europe and of men in the United Provinces. What is the reason of these dissimilar results?

If it is right to suppose that nature aims at a balance of the sexes, one would seek for the reason in some interference with nature. The province is charged with such interference, which is alleged to take the following forms:—

Possible reasons of the disproportion examined.

- (1) Female infanticide.
- (2) Neglect of female children.
- (3) Early marriage and premature child-bearing.
- (4) Insanitary methods of midwifery.
- (5) Hard treatment accorded to women, especially to widows.
- (6) Hard work done by women.

The female infanticide once undeniably practised was due to the social

Country.	Males to 1,000 females born.
England and Wales	1,039
Scotland	1,043
Ireland	1,051
Australia	1,052
New Zealand	1,057
Hungary	1,057
Finland	1,053
Netherlands	1,052
Switzerland	1,039
Denmark	1,050

necessity of finding a husband for a daughter and to the burden thereby imposed, especially among castes recognizing the rule of hypogamy. That it is now practised on any scale that could affect the figures is, I think, at once disproved by the figures themselves. The proportion of males at birth is very unusually high. During the decade it has never fallen below 1,080 to 1,000 females, while the proportion in the pre-war decade for those countries for which figures are available to me were as in the margin. Yet males lose their advantage in an aston-

ishingly short time—in little more than a year. This would hardly be possible if female infanticide were anything but very exceptional. The same line of argument produced further disposes of the second allegation—neglect of female children. For female children continue to gain on male children till the fourth year, when they number 1,083 to 1,000 and have almost exactly reversed the position at birth. In any case this allegation is hard to reconcile with what is known of the character of the people.

That early marriage and premature child-bearing make havoc among women admits of no doubt. Most marriages are consummated when the girl reaches puberty, which may be taken to be at about the age of 12. And the proportion of women falls from 908 in the 5—10 period to 761 in the 10—15 period. The real fall must be larger than the figures show: for the returned age 10, which

as explained in the chapter on age steals a big fraction of the actual eights and nines, and steals more in the case of females than in that of males, is included in the later period. The proportion recovers but is still low—792—between 15 and 20. But here again the recovery is really better than is apparent, being masked by the inclusion of the returned age 20 in the 20—25 group.

The statistics of other countries show no female mortality at the age of marriage on anything like the scale indicated here.

Part of this mortality is probably attributable to insanitary methods of midwifery. That such methods are prevalent and are fatal to a large number of mothers at child-birth is invariably asserted by competent observers. There are no statistics however bearing on the subject.

The allegation that women are hardly treated is one that scarcely admits of examination. It is doubtful however whether hard treatment can affect mortality. Lastly, the suggestion that the mortality of women is adversely affected by hard work is completely negatived by the statistics: by the fact that women once they have reached old age last longer than men, and by a glance at Subsidiary Table IV. This table shows that the castes whose women work hardest generally have a high proportion of women, and that this high proportion is maintained till old age: see especially Chamar, Pasi, Dhobi, Luniya, Kumhar, Koeri and Kowat.

The only interference with nature, therefore, that can be shown to upset the balance of the sexes is the custom by which girls are married before they are fit to bear children, coupled with the superstitious observances and unclean practices which pass for midwifery among the great mass of the people. These handicaps probably account for the whole disproportion. For women lose in numbers only at the marriage age (I have pointed out why the figure for the period 5—10 is inaccurate) and once that is left behind recover their relative position to a certain extent, and finally repass men after 60.

The suggestion has been made that England has (in normal times, not only after a war) a surplus of women, and India a surplus of men, because the Englishman leads a more adventurous and hazardous life than the Indian. This suggestion will not bear examination. Bulgaria before the war had more men than women. And life in Bulgaria is credited with having been more hazardous than in England. Nor do I understand Mr. Blunt's suggestion that males predominate in new countries. For this province is the last place I should call a new country.

The conclusion arrived at then is that presupposing an attempt on nature's part to achieve a balance of the sexes, that attempt is defeated as regards the United Provinces by the marriage customs of the people. It is useless to try to explain dissimilarities in the proportion of men to women as between this and other countries. All that can be done is to seek, for each country separately, the causes that upset the natural balance.

4. I have discussed the reason why in the province women are permanently fewer than men. It now falls to be considered why their numerical inferiority is now even more marked than in 1911. As a result of previous experience certain generalisations have found acceptance as true of India. It is said that famine and scarcity fall more heavily on men than on women, while epidemic diseases such as plague and influenza fall more heavily on women than on men. The decade has been free from serious famine; and it might be thought that herein lies the explanation that is being sought. But there was widespread scarcity in 1914, and the vital statistics for what they are worth do not bear out the generalisation to which I have alluded. The relevant figures are shown in the margin. Plague has diminished in intensity right through the decade, and may be left out of account. As regards the influenza epidemic, the figure (male deaths to 1,000 female deaths) given by the Sanitary Commissioner for the whole year 1918 is 1,085, and suggests that both sexes were equally affected. The proportion for the influenza period only however is 1,040, and if it could be accepted as even approximately accurate, would account for all that is to be accounted for. I have however already given reasons for the view that the vital statistics for this period are wholly unreliable, and it would be unsafe to use them for any purpose. As a matter of *a priori* reasoning the influenza

The increased disproportion found at this census.

Year.	Male deaths per 1,000 female deaths.
1912	1,098
1913	1,108
1914	1,087
1915	1,087
1916	1,089

the vital statistics for this period are wholly unreliable, and it would be unsafe to use them for any purpose. As a matter of *a priori* reasoning the influenza

epidemic should have hit men harder than women. For it came at the busiest agricultural season—when the autumn harvest was being got in and the fields were being prepared for the spring crops. At such a time to cease work meant for the peasant at best serious loss and at worst starvation: and men commonly did not give in to the disease till they were no longer able to stand. This I witnessed myself. Resistance of such a kind, according to all medical testimony, greatly prejudices the chance of recovery. If indeed influenza proved in 1918 more fatal to women than to men—as the Sanitary Commissioner held—it is difficult to reconcile the fact with another assertion of the same Sanitary Commissioner, that the epidemic was more severe in the West than in the East. For during the decade, as already stated, in the West women increased relatively to men, while in the East they declined. It is in fact impossible to attribute with confidence the continued drop in the proportion of females to the influenza epidemic.

It can however be fully accounted for by the relative increase of male births which began in 1915 and has been very marked since 1917. The figures have already been given in the third paragraph of this chapter. And if the vital statistics can be accepted as accurate in this respect (as I think they can) there is no more to be said. As to the reason for the rise in the relative male birth-rate I can make no suggestion. But it coincides significantly with the war and post-war period, and is interesting in view of Mr. de Jastrzebski's* observation that in Europe masculinity at birth has increased since 1914 not only in belligerent but also in neutral countries.

*Changes in
the sex
proportion
within the
province.*

5. Changes in the sex proportion within the province are to me wholly inexplicable. The tendency of the decade has been, as already observed, towards a levelling of the proportion as between East and West. To attribute this tendency to the influence of agricultural conditions or of epidemics is impossible on the evidence available. I do not think we know the incidence of the influenza epidemic: but we have no opinion better than that of the Sanitary Commissioner, and he has held on the strength of his vital statistics that the outbreak did more damage in the West, where women have gained relatively to men, than in the East where they have lost. And competent opinion, backed again by vital statistics, has decided that influenza kills more women than men. Again, given that scarcity and famine is more fatal to men than to women, such scarcities as have occurred since 1911 were nowhere more severe than in Muttra and the districts of the Central India Plateau. In the former the sex proportion is unchanged, and in the latter women have gained ground.

*The sex
proportion
dependent on
territorial not
on genetic
factors.*

6. But if changes within the decade are inexplicable, sufficient statistics have now been collected at succeeding censuses and otherwise to point to certain conclusions of a more general nature. The figures we have suggest very strongly that sex proportion depends not on genetic but on territorial factors; not on social conditions but on natural environment; and lastly, probably on climate in the large sense of the Hindustani "abohawa," or on some element therein.

It is impossible definitely to distinguish by race the bulk of the population. Excluding Europeans, Parsis, and such communities whose numbers are too small or whose conditions of life are too unnatural for inferences to be deducible from their statistics, it is only possible to say that, loosely speaking, the Hindus differ in race from the Muhammadans. The sex proportion of Hindus and Muhammadans is nearly identical. It is now 909 females to 1,000 males for the former, and 912 for the latter. In 1911 the figures were 915 and 902 respectively. The difference is wholly negligible as compared with the difference between other units for which statistics have been prepared. One would expect the Muhammadan to exceed the Hindu proportion of women by more than this, on account of the later age at which Muhammadan girls are generally married—an artificial and not a genetic factor. The great advantage undoubtedly conferred by this factor is, it is suggested, counterbalanced by the tendency of Muhammadans to be concentrated in the West. Jains and Aryas who are in everything but mere religion identical with Hindus and who are even more concentrated in the West than are the Muhammadans have sex proportions of 845 and 811 respectively.

Subsidiary Table IV shows the sex proportion for a number of representative castes. These castes are certainly not races, but they are the products of centuries

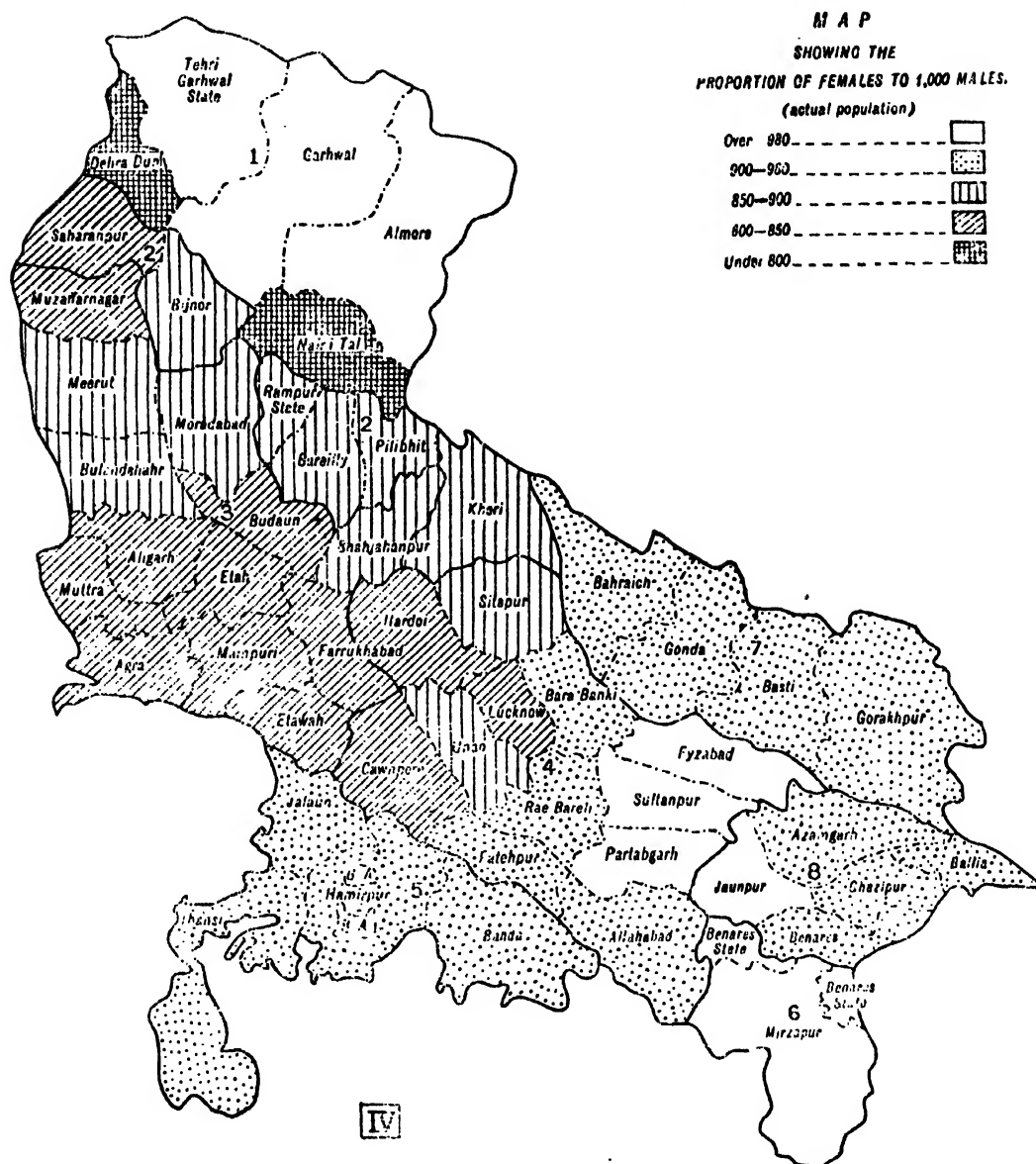
*In his paper entitled "The Sex Ratio at Birth."

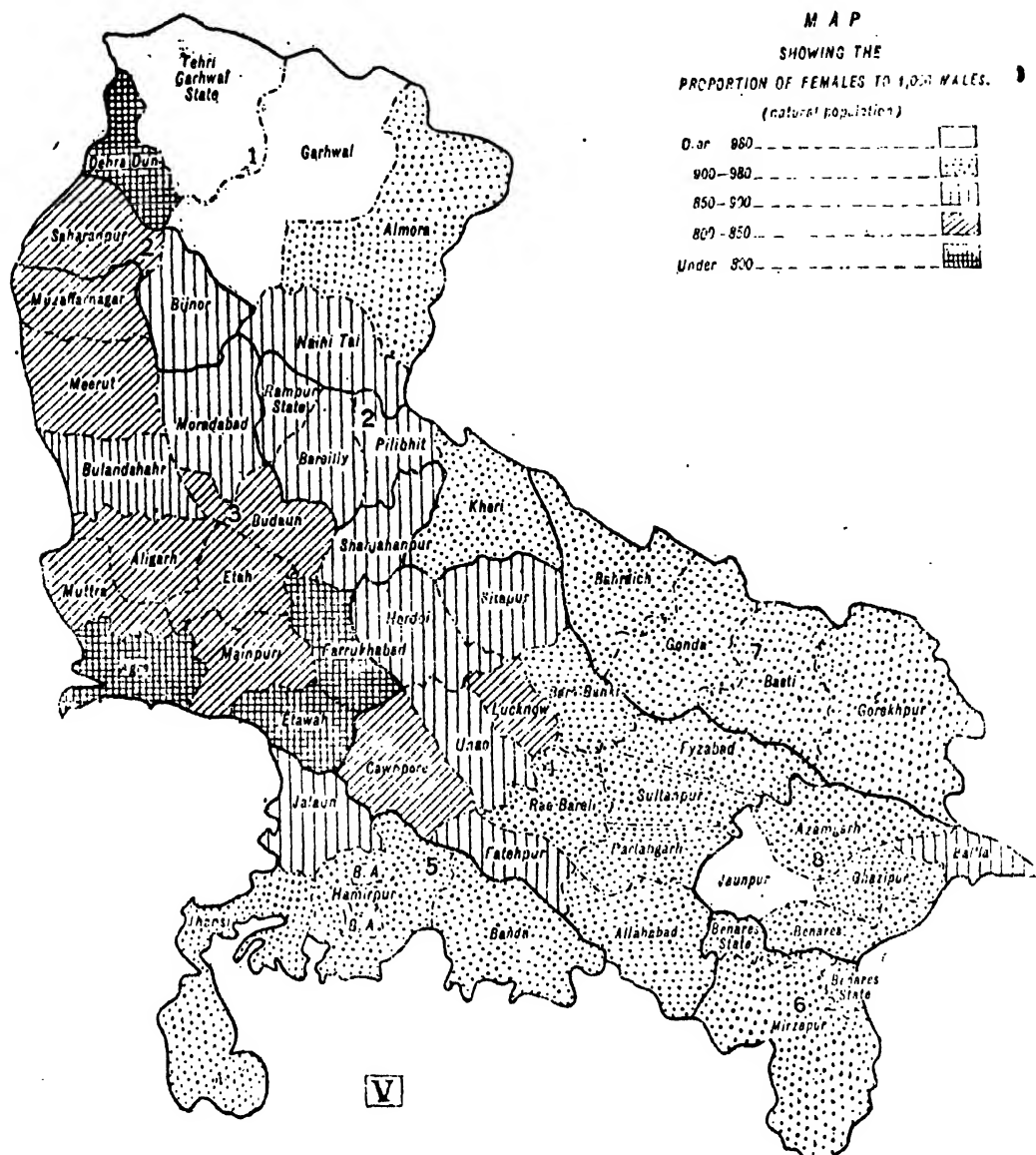
of in-breeding. Certain of them are akin to others, having probably in some cases sprung from the same stock. Some of them live under practically identical social conditions. But an examination of this table either for the present census or for the last conveys an impression of inexplicable chaos. If the castes were arranged in any order of racial constitution, based for instance on their supposed share of Aryan or Dravidian blood, or of social prosperity, and the statistics were shown in graphic form, no sort of curve would result. If they were grouped according to their kinship or the similarity of the social conditions under which they live, the statistics for each group would have no sort of uniformity. Brahman, Bhat, Bhuinhar and Taga all probably spring from the same stock: their sex figures in 1911 were respectively 899, 815, 985 and 786. Barai and Tamboli are practically interchangeable terms for the same caste having a single occupation and a uniform social environment: their figures are 959 and 905. Agarwal, Agrahari, Kasaundhan, Baranwal and Gohoi are closely allied trading communities with similar material position and similar ways of life: their figures are 794, 953, 919, 861 and 961. It is difficult to distinguish between the Kahar, Mallah and Kowat; whose figures are 932, 1,143 and 985. And so on—instances like this could be multiplied.*

If one now turn from this table to Subsidiary Table I, quite a different impression is produced. Of the districts here shown Fyzabad, Rae Bareilly, Partabgarh and Sultanpur should be disregarded, for their sex figure is upset by their loss of male emigrants to Bengal. It is also proper to neglect Cawnpore, where the city is full of semi-permanent male labourers who have left their families elsewhere, and Naini Tal, whose population is of too shifting a character to be the basis of any inferences. It is obvious at once that the sex proportions are grouped geographically. The hills—Almora, Garhwal and the Tehri Garhwal State (for Naini Tal and Dehra Dun are only partly montane)—have a uniformly high proportion of females: so has the East of the province and the Central India Plateau (to which parts of Mirzapur and Allahabad properly belong). The proportion is uniformly low in the west and centre of the province. And, generally speaking, the transition from a high to a low proportion is remarkably smooth. The low proportion of Agra and the surrounding districts grows by gradual increments on one side through the submontane tract to the hills, on another through Oudh to the Eastern Plain, and on the third through Jalaun, lying at the foot of the Central India Plateau, to Banda (the Jhansi figures being upset by a large garrison town) on its crest.

*The figures of 1911 are used in the above discussion because the larger selection of that year gives a wider range of instances.

The point here made is illustrated by the accompanying maps. The





hatchuring of these maps has been designed to make each district and state appear dark in proportion to its preponderance of males.* The first map shows the sex proportion calculated on the actual, and the second that calculated on the "natural" population of each district and state. The actual population of a district is the sum of the people found present in it on the 18th March, 1921. The natural population is the actual population *plus* all persons born in the district but enumerated elsewhere, and less all persons born elsewhere but enumerated in the district. It will be seen that the transition from a high to a low proportion of women is slightly more smooth in the second than in the first map.

If it has been shown then that the sex proportion varies as between communities in so chaotic a manner that it is obvious that the determining factor lies without the community: while it varies as between localities in a way that suggests a cause of variation within the locality: is there anything to indicate what that cause may be? Possibly a hint as to the cause may be obtained by a process of exclusion. Fatehpur (sex proportion 911) does not differ appreciably from Mainpuri (816) in the race constitution of its inhabitants or their ways of life, in its physical configuration, or even in its climate in the popular European sense. But the people of the country are very clear that these two districts (and almost any other two districts) differ markedly in climate as locally understood—in "ab o hawa," water and air, and especially in water. And the people know best in what respects different parts of their own country are

*Caution is therefore necessary in comparing these maps with those printed on pages 181 and 182 of the last Report, in which the hatchuring is different.

unlike. It would be out of place to pursue the matter further. But it is, I think, at least worth consideration whether the sex proportion of a locality is not determined by its water—which I suppose is another way of saying by the mineral constitution of its soil.

Before leaving this subject I would draw attention, as possibly bearing upon it, to the very remarkable vital statistics of Dehra Dun. The district has a shifting population, but this fact affects only the quantity not the sex proportion of its birth returns. And if these birth returns are incomplete or inaccurate, they are presumably no more inaccurate here than elsewhere, and no more inaccurate for one sex than for the other. Throughout the decade Dehra Dun has recorded a preponderance of males over females born very exceptionally high relatively to the rest of the province, and in most years very remarkably higher than that

Year.	Number of males to every 1,000 females born in Dehra Dun.	Ratio of males to females in this district to other districts in the province.	Next highest figures shown for any other district.	Ratio of males to females in Dehra Dun to that in any other district.	Ratio of males to females in Dehra Dun to that in the province.
1911 ..	1,178		1,127	1,011	1,084
1912 ..	1,202		1,144	1,004	1,084
1913 ..	1,171		1,138	1,027	1,082
1914 ..	1,160		1,120	1,029	1,084
1915 ..	1,147		1,138	1,024	1,088
1916 ..	1,110			1,005	1,086
1917 ..	1,110			1,021	1,034
1918 ..	1,184		1,172	990	1,097
1919 ..	1,155			1,028	1,104
1920 ..	1,204		1,176	1,015	1,101

recorded by any other district. The table in the margin illustrates this point. As to what the reason may be I have no suggestion to make other than that made above. The district has a very low recorded birth-rate, but owing to the unstable population it is impossible to calculate the relation between the recorded and the real birth-rate. The population is probably less homogeneous than that of any other district; while the terrain is unique, being largely a broad valley lying between two ranges of hills.

Summary of conclusions propounded in this chapter.

7. The conclusions suggested by the sex statistics may now be summarised. Over the province as a whole, the sex balance at which presumably nature aims is appreciably upset by only one, but that a very important interference with nature—the premature marriage of women. As between different parts of the province, the variation of the sex proportion cannot be attributed to any difference in the race constitution or ways of life of the inhabitants, but must be looked for in the differences of some physical element in their habitat. What this element may be is a matter for conjecture, but it is suggested that it may be the water or in other words the mineral constitution of the soil.

As to the changes that have occurred during the decade, the relative increase of males in the province as a whole does not appear—or at any rate cannot be proved—to be connected with the absence of famine or with the influenza epidemic of 1918, as widely held theories would lead one to expect. It can only be accounted for by an increase of masculinity at birth which began in the year following the outbreak of the war, and has been progressively more marked during the second half of the decade. This phenomenon has been observed elsewhere during the same period not only in belligerent but also in neutral countries and is in consonance with a common belief—and one for which there is evidence—that a world shortage of either sex tends in some unexplained way to be made good.

For the changes in the sex proportion within the province I can suggest no reason: their general tendency has been towards a levelling of the proportion as between East and West.

Subsidiary Table I.—*General proportion of the sexes by natural divisions and districts.*

Number of females to 1,000 males.

	1921.		1911.		1901.	
	Actual population.	Natural population.	Actual population.	Natural population.	Actual population.	Natural population.
United Provinces	909	896	915	903	937	923
<i>Himalaya, West *</i>	<i>932</i>	<i>961</i>	<i>903</i>	<i>949</i>	<i>913</i>	<i>949</i>
Dohra Dun	657	789	697	830	733	743
Naini Tal	722	853	770	880	799	884
Almora	999	957	970	962	955	966
Garhwal	1,084	1,013	1,036	1,009	1,032	1,052
Tehri Stato	1,035	1,019	1,028	1,017	1,015	1,001
<i>Sub-Himalaya, West *</i>	<i>865</i>	<i>868</i>	<i>856</i>	<i>860</i>	<i>881</i>	<i>895</i>
Saharanpur	817	811	823	823	874	872
Barilly	861	866	843	850	862	851
Bijnor	900	882	887	873	918	911
Pilibhit	884	891	861	881	884	912
Kheri	884	913	875	887	891	907
Rampur State	867	864	877	875	898	902
<i>Indo-Gangetic Plain, West</i>	<i>811</i>	<i>832</i>	<i>841</i>	<i>832</i>	<i>868</i>	<i>841</i>
Muzaffarnagar	839	800	817	779	869	805
Moorut	852	841	848	832	876	869
Bulandshahr	893	862	897	878	900	879
Aligarh	847	845	852	843	891	870
Muttra	815	812	815	818	866	835
Agra	818	787	831	826	864	855
Mainpuri	816	810	817	787	837	789
Etah	848	839	837	825	851	857
Budaun	818	835	823	825	854	871
Moradabad	877	875	877	871	883	890
Shahjahanpur	853	867	843	864	862	878
Farrukhabad	826	796	822	829	818	854
Etawah	815	796	824	824	842	824
<i>Indo-Gangetic Plain, Central</i>	<i>921</i>	<i>905</i>	<i>933</i>	<i>907</i>	<i>956</i>	<i>948</i>
Cawnpore	802	841	832	849	868	887
Fatehpur	911	880	933	920	965	950
Allahabad	915	947	972	957	1,000	981
Lucknow	845	839	856	885	912	915
Unao	890	881	903	901	957	939
Rae Baroli	972	925	991	959	1,027	986
Sitapur	873	862	878	873	896	891
Hardoi	850	860	833	868	876	885
Fyzabad	991	956	1,005	983	978	982
Sultanpur	1,031	973	1,032	972	1,026	985
Pantnagar	1,049	963	1,059	1,007	1,046	1,061
Bara Banki	918	903	921	903	953	957
<i>Central India Plateau</i>	<i>936</i>	<i>916</i>	<i>959</i>	<i>966</i>	<i>969</i>	<i>943</i>
Jhansi	922	961	954	939	956	886
Jalaun	901	871	932	901	978	895
Hamirpur	962	969	981	976	992	986
Banda	955	933	980	1,024	987	990
<i>East Satpuras</i>	<i>1,001</i>	<i>955</i>	<i>1,020</i>	<i>1,002</i>	<i>1,012</i>	<i>1,016</i>
Mirzapur	1,003	970	1,020	1,002	1,042	1,016
Benares Stato	997	924	..	..	..	..
<i>Sub-Himalaya, East</i>	<i>958</i>	<i>942</i>	<i>975</i>	<i>961</i>	<i>980</i>	<i>975</i>
Gorakhpur	970	957	995	977	1,011	1,013
Basti	955	939	976	967	973	951
Gonda	957	932	965	917	965	957
Bahraich	922	915	924	923	931	944
<i>Indo-Gangetic Plain, East</i>	<i>971</i>	<i>937</i>	<i>995</i>	<i>966</i>	<i>1,039</i>	<i>993</i>
Benares	953	901	981	969	982	967
Jaunpur	1,011	983	1,007	1,003	1,039	1,014
Ghazipur	960	903	998	965	1,075	998
Ballia	919	892	995	922	1,084	1,002
Azamgarh	959	934	991	965	1,020	982

* The 1911 and 1901 figures for these Natural Divisions do not take their respective states into account.

Subsidiary Table II.—*Number of females religions at each of*

Age.				All religions.		
				1901.	1911	1921.
0—1	..	..	..	967	962	945
1—2	..	..	..	1,026	1,011	1,012
2—3	..	..	..	1,014	1,032	1,063
3—4	..	..	..	1,023	1,042	1,082
4—5	..	..	..	987	990	998
Total 0—5	..	..	..	1,000	1,000	1,014
5—10	..	..	..	912	906	908
10—15	..	..	..	801	786	769
15—20	..	..	..	829	805	791
20—25	..	..	..	1,001	933	977
25—30	..	..	..	948	929	924
Total 0—30	..	..	..	913	908	893
30—40	..	..	..	945	931	923
40—50	..	..	..	949	914	910
50—60	..	..	..	971	940	913
60 and over	..	..	..	1,165	1,081	1,053
Total 30 and over	..	..	..	981	948	931
Total of all ages (actual population)				937	915	909
Total of all ages (natural population).				923	903	896

Subsidiary Table III.—*Number of females per 1,000 males*

Age.	Himalaya, West.			Sub-Himalaya, West.			Indo-Gangetic Plain, West.			Indo-Gangetic Plain, Central.		
	All religions.	Hindus.	Muhammadians.	All religions.	Hindus.	Muhammadians.	All religions.	Hindus.	Muhammadians.	All religions.	Hindus.	Muhammadians.
1	2	3	4	5	6	7	8	9	10	11	12	13
Total 0—5 ..	1,037	1,036	1,092	989	981	1,012	977	970	1,016	1,022	1,018	1,048
0—1 ..	988	989	976	949	950	947	929	926	947	939	934	971
1—2 ..	1,027	1,025	1,038	1,024	1,011	1,052	1,000	994	1,032	1,032	1,044	1,128
2—3 ..	1,065	1,067	1,040	1,007	992	1,046	988	979	1,035	1,066	1,065	1,076
3—4 ..	1,104	1,100	1,202	1,047	1,013	1,063	1,046	1,043	1,073	1,083	1,083	1,089
4—5 ..	1,023	1,022	1,047	954	937	1,007	954	940	1,080	1,018	1,014	1,044
Total 0—30 ..	941	938	687	867	856	897	847	822	894	905	921	931
5—10 ..	957	962	844	892	881	918	890	882	929	910	904	939
10—15 ..	869	880	718	737	716	763	705	689	704	768	772	764
15—20 ..	903	928	596	777	766	812	782	773	829	786	782	828
20—25 ..	928	904	536	950	938	990	912	906	951	1,010	1,006	1,098
25—30 ..	953	991	555	876	863	915	812	800	875	933	949	1,001
Total 30 and over.	917	944	554	862	859	878	839	838	851	944	944	947
30—40 ..	917	946	535	825	809	872	816	808	852	937	934	977
40—50 ..	884	910	541	845	841	859	843	841	866	927	929	924
50—60 ..	900	920	583	888	894	878	847	843	884	911	910	928
60 and over ..	1,026	1,049	629	978	1,007	914	887	898	831	1,042	1,067	948
Total of all ages (actual population).	1,823,056	1,710,544	94,312	4,480,211	3,154,144	1,264,604	12,145,963	9,746,547	2,070,426	11,920,193	10,409,034	1,371,155
Total of all ages (natural population).	1,732,315	..	..	4,522,443	..	..	12,290,380	..	..	12,156,937	..	..

per 1,000 males at different age-periods by
the last three censuses.

Hindus.			Muhammadans.		
1901.	1911.	1921.	1901.	1911.	1921.
961	957	943	993	979	956
1,029	1,012	1,011	1,003	1,003	1,022
1,014	1,029	1,053	1,011	1,041	1,059
1,022	1,040	1,081	1,031	1,058	1,089
985	986	993	998	995	1,040
999	996	1,012	1,007	1,013	1,029
910	904	904	928	918	929
799	765	759	818	771	761
820	799	787	886	813	822
995	979	975	1,057	1,016	1,010
945	960	921	994	958	952
909	893	891	941	917	913
941	933	923	965	930	927
947	915	913	972	913	895
972	952	919	971	913	888
1,186	1,112	1,080	1,063	952	927
981	955	909	981	927	912
935	915	909	951	921	912
..

at different age-periods by religions and natural divisions (census of 1921).

Central India Plateau.			East Satpuras.			Sub-Himalaya East.			Indo-Gangetic Plain, East.			United Provinces.		
All religions.	Hindus.	Muhammadans.	All religions.	Hindus.	Muhammadans.	All religions.	Hindus.	Muhammadans.	All religions.	Hindus.	Muhammadans.	All religions.	Hindus.	Muhammadans.
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
982	980	1,037	1,040	1,034	1,098	1,046	1,045	1,053	1,054	1,059	1,007	1,014	1,012	1,029
902	901	938	901	900	916	970	971	965	970	971	954	945	943	956
832	823	1,020	1,034	1,004	1,514	1,023	1,035	959	999	1,023	819	1,012	1,011	1,022
1,050	1,064	1,020	1,125	1,123	1,151	1,097	1,098	1,092	1,119	1,126	1,061	1,053	1,05	1,059
1,071	1,065	1,172	1,098	1,083	1,066	1,105	1,104	1,100	1,133	1,134	1,130	1,082	1,081	1,089
996	993	1,046	1,036	1,035	1,052	1,037	1,022	1,102	1,016	1,020	999	998	993	1,040
900	903	904	982	982	961	913	912	921	942	930	1,000	893	891	913
913	909	963	964	961	1,009	910	912	899	925	918	994	908	904	929
789	790	780	853	854	826	785	789	753	783	782	797	759	759	761
833	835	822	879	881	834	758	752	790	810	798	929	791	787	822
950	964	900	1,124	1,145	871	999	990	1,056	1,086	1,072	1,240	977	976	1,010
947	954	899	1,083	1,081	1,104	987	981	1,020	1,054	1,037	1,231	924	921	952
1,001	1,003	998	1,035	1,043	932	1,034	1,038	1,003	1,020	1,021	1,001	934	909	912
934	930	945	1,024	1,037	871	1,013	1,012	1,082	1,058	1,050	1,156	923	923	927
933	936	912	982	983	981	973	974	963	973	971	993	910	913	895
1,037	1,057	1,052	1,017	1,023	920	993	1,000	95	938	940	858	913	919	888
1,356	1,370	1,314	1,219	1,195	1,021	1,301	1,338	1,101	1,114	1,137	927	1,053	1,080	927
2,065,297	1,921,585	124,022	1,087,043	1,012,946	71,604	7,730,533	6,603,431	1,121,312	5,249,372	4,734,696	507,312	46,510,668	39,292,926	6,721,967
2,136,378	..	..	1,097,891	..	..	7,787,587	..	..	5,619,163	..	..	47,430,538	..	..

Subsidiary Table IV.—*Number of females per 1,000 males for certain selected castes.*

Caste.			Number of females per 1,000 males.						
			All ages.	0—5.	5—12.	12—15.	15—20.	20—40.	40 and over.
			2	3	4	5	6	7	8
1. Brahman .. ..	..	..	895	947	882	770	770	903	954
2. Rajput .. ..	..	..	877	940	874	778	770	895	904
3. Sonar .. ..	..	..	840	1,018	888	757	764	792	850
4. Shaikh .. ..	..	..	890	1,014	901	768	817	919	851
5. Kayasth .. ..	..	..	865	1,005	946	799	781	819	866
6. Chamar .. ..	..	..	960	1,039	882	837	901	1,007	991
7. Kahar .. ..	..	..	937	1,116	843	797	848	987	941
8. Pathan .. ..	..	..	878	1,020	922	809	749	824	916
9. Gadariya .. ..	..	..	893	1,034	878	815	813	883	907
10. Kumbhar .. ..	..	..	931	1,046	907	851	838	939	935
11. Dhobi .. ..	..	..	936	1,063	901	801	873	952	953
12. Lohar .. ..	..	..	895	1,053	891	820	785	893	889
13. Nai .. ..	..	..	911	1,028	886	778	838	915	942
14. Saiyid .. ..	..	..	937	1,024	906	810	940	971	919
15. Barhai .. ..	..	..	869	1,017	871	742	805	867	867
16. Julaha .. ..	..	..	922	1,048	875	819	868	952	898
17. Teli .. ..	..	..	906	1,033	884	792	845	907	924
18. Lodha .. ..	..	..	902	1,048	882	775	808	902	927
19. Bharbhunja .. ..	..	..	867	1,016	897	790	806	852	845
20. Kalwar .. ..	..	..	921	1,030	909	835	806	934	931
21. Bhangi .. ..	..	..	908	1,000	872	781	897	954	876
22. Agarwal .. ..	..	..	798	936	921	730	782	741	761
23. Rasi .. ..	..	..	946	1,031	897	928	904	968	928
24. Ahir .. ..	..	..	897	1,017	864	879	763	891	929
25. Luniya .. ..	..	..	986	1,081	917	852	813	1,015	1,053
26. Kachhi .. ..	..	..	880	1,025	829	806	842	843	913
27. Kurmi .. ..	..	..	909	1,051	874	847	817	890	954
28. Gujar .. ..	..	..	785	878	778	640	678	801	822
29. Jat .. ..	..	..	763	848	765	661	690	768	782
30. Bhuihar .. ..	..	..	939	1,019	911	723	733	997	1,049
31. Koori .. ..	..	..	905	1,040	899	805	851	948	1,002
32. Anglo-Indian .. ..	..	..	1,013	953	922	635	917	1,240	1,097
33. Indian Christian .. ..	..	..	926	961	941	735	846	983	922
Average of the above castes .. ..	..	..	907	1,011	879	806	816	919	929

Subsidiary Table V.—*Actual number of births and deaths for each sex during the decades 1901—1910 and 1911—1920.*

Year.	Number of births.			Number of deaths.			Difference between columns 2 and 3. Excess of latter over former +, defect —.	Difference between columns 5 and 6. Excess of latter over former +, defect —.	Difference between columns 4 and 7. Excess of former over latter +, defect —.	Number of female births per 1,000 male births.	Number of female deaths per 1,000 male deaths.
	Males.	Females.	Total.	Males.	Females.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12
1901 ..	1,022,769	949,362	1,972,131	752,949	692,086	1,445,035	—73,407	—60,863	+527,096	928	919
1902 ..	1,131,319	1,054,882	2,186,201	801,046	751,000	1,552,046	—76,437	—50,045	+634,155	932	937
1903 ..	1,140,228	1,050,803	2,200,031	988,354	932,549	1,920,903	—80,425	—55,805	+279,128	929	944
1904 ..	1,154,988	1,070,769	2,225,757	825,100	829,849	1,654,949	—84,219	+4,749	+570,808	927	1,006
1905 ..	1,023,092	913,917	1,967,009	1,049,708	1,048,592	2,098,300	—79,175	—1,116	—181,291	923	999
1906 ..	993,311	919,114	1,918,425	953,369	910,027	1,863,336	—80,197	—43,282	+55,089	920	955
1907 ..	1,022,318	941,645	1,963,963	1,019,012	1,023,524	2,072,536	—80,673	—25,488	—108,573	921	978
1908 ..	982,276	854,426	1,786,702	1,274,960	1,239,795	2,514,761	—77,850	—35,171	—728,059	916	972
1909 ..	827,732	761,464	1,589,196	922,189	858,880	1,781,069	—60,268	—63,309	—191,873	920	931
1910 ..	1,017,065	938,359	1,955,424	963,480	880,698	1,844,178	—78,706	—82,782	+111,246	923	914
Total 1901—1910	10,271,098	9,493,741	19,764,839	9,580,113	9,167,000	18,747,113	—777,357	—413,113	+1,017,726	924	957
1911 ..	1,008,248	985,076	2,053,324	1,082,162	1,023,130	2,105,292	—83,172	—59,032	—51,968	922	945
1912 ..	1,105,707	1,019,878	2,125,585	733,254	657,553	1,400,807	—85,289	65,701	+724,778	922	910
1913 ..	1,160,280	1,072,719	2,232,999	857,707	773,926	1,631,693	—87,551	—83,841	+601,306	925	902
1914 ..	1,094,842	1,009,712	2,104,554	810,149	751,117	1,567,263	—85,130	—65,032	+537,288	922	920
1915 ..	1,080,779	975,342	2,038,121	732,610	674,133	1,406,743	—85,437	—58,477	+629,378	919	930
1916 ..	1,050,582	967,224	2,017,753	720,097	661,202	1,381,299	—83,308	—58,895	+636,457	921	918
1917 ..	1,122,101	1,035,541	2,157,642	933,723	841,173	1,774,896	—83,560	—92,550	+382,746	923	901
1918 ..	977,044	890,800	1,877,844	2,003,883	1,849,879	3,853,762	—80,244	—157,004	—1,988,918	912	922
1919 ..	795,870	720,627	1,516,497	1,017,335	934,327	1,951,662	—75,243	—83,008	—435,165	905	918
1920 ..	872,094	792,098	1,664,192	913,899	828,936	1,742,835	—79,996	—84,963	—78,643	908	907
Total 1911—1920	10,307,497	9,460,017	19,776,514	9,813,879	9,005,376	18,819,255	—839,480	—808,503	+957,259	919	918

Subsidiary Table VI.—Number of deaths of each sex at different ages.

Age.	1911.		1912.		1913.		1914.		1915.		1916.		1917.		1918.		1919.		1920.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under 1 year ..	271,575	233,771	236,328	202,694	275,529	237,688	260,739	230,608	222,603	195,695	224,735	198,395	247,104	218,363	301,236	265,597	501,368	182,720	194,722	171,815
1—5 ..	146,534	147,496	102,764	100,730	140,922	136,136	155,929	152,438	123,512	122,080	134,976	134,253	182,300	179,483	274,539	264,865	174,237	172,920	173,437	167,673
5—10 ..	73,024	71,289	35,275	32,855	40,146	37,169	38,301	35,231	34,620	30,470	35,428	31,166	52,005	47,543	155,094	114,021	71,828	69,155	61,805	54,983
10—15 ..	53,911	50,221	27,421	24,108	30,615	26,290	27,205	24,513	24,405	21,205	21,813	18,835	31,041	27,987	96,817	82,249	45,164	36,589	35,095	27,736
15—20 ..	43,341	43,358	21,859	22,161	24,774	24,531	21,879	22,858	19,054	20,969	17,381	18,503	26,828	25,014	105,273	96,745	41,015	40,473	29,436	28,289
20—30 ..	99,616	109,969	59,287	65,599	65,610	68,968	53,721	62,850	54,171	59,221	47,548	50,510	71,559	63,980	187,578	295,480	101,365	105,650	76,849	78,804
30—40 ..	93,113	93,591	57,476	53,527	62,149	57,463	56,370	52,156	53,358	49,932	48,623	43,905	71,441	61,243	247,832	236,562	94,714	89,101	79,101	72,261
40—50 ..	97,418	85,655	60,182	49,111	65,552	52,517	55,502	46,892	50,827	45,839	53,506	42,732	76,550	58,534	214,560	177,830	90,503	72,537	76,504	61,703
50—60 ..	89,759	78,407	57,991	48,445	69,090	51,498	57,230	47,428	57,400	47,886	54,565	46,115	73,766	59,888	170,999	145,573	85,706	69,433	76,877	64,766
60 and over ..	111,571	108,843	74,671	71,353	89,050	81,786	81,273	75,713	83,451	81,400	81,502	76,728	101,129	94,180	182,935	170,897	113,435	102,429	110,073	100,906
Total ..	1,982,169	1,023,130	733,254	667,553	837,767	773,926	816,149	751,117	732,610	674,133	724,097	661,902	933,723	841,173	2,006,883	1,549,579	1,017,365	934,327	933,899	825,436

Chapter VII.—CIVIL CONDITION.

THE absolute figures relative to Civil Condition appear in Imperial Tables VII and XIV. Proportions are exhibited in various aspects in the Subsidiary Tables. *Introductory.*

The question asked by the enumerators in reference to Civil Condition was simple: "Are you married, unmarried or widowed?"—the word used for "married" being *biyaha*. Now *biyah* means marriage by the full legal rite, and doubt might arise as to the proper entry where marriage had been contracted by the maimed rites (*dharewa*, *sagui*, or *karao*) recognised, generally speaking, by the castes that permit widow remarriage. Such doubt was resolved by the instructions given to enumerators to enter as married anyone regarded as such by his or her castefellows, irrespective of the views on the subject entertained by persons of other or higher caste.

It will be noticed that no separate figures are given for divorced persons. These are negligible in number, divorce being practically unknown among Hindus and rare among Muhammadans, and were by direction entered as widowed. Persons however who having been widowed by death or divorce had married again were returned as married.

It is necessary, before dealing with the figures, to emphasise that they are not comparable with those of any country outside India. Marriage among Hindus means no more than irrevocable betrothal. The parties do not begin to live together immediately after the ceremony, but after the lapse of an indefinite period, generally of not less than one and of not more than five years. Conjugal relations are preceded by a second ceremony known as *gauna*, *rukhsat*, or *vida*. The statistics under examination cannot therefore be used indiscriminately to condemn or belaud Indian society for tending towards a lower or a higher age of marriage. Provided the *gauna* is postponed, the only harm done by the custom of an early *biyah* is that it must obviously swell the number of widows condemned by convention to lifelong celibacy. Assuming, as one surely may, that the immature marriage known to be prevalent stands condemned, it could only be known with certainty that society¹ is tending to adopt more or less salutary customs in this respect, if statistics were obtained of the age of the parties to the *gauna* ceremony. Unfortunately such statistics have not been obtained, and are probably unobtainable.

So much and no more by way of introduction. The subject of marriage customs has been exhausted in previous reports, and for a full discussion of it and of everything in any way connected with it the reader is referred to the volume of 1911.

¹That is to say Hindu and Arya Samaj Society. Among Muhammadans conjugal life ordinarily begins immediately after marriage.

The General Statistics.

2. The general statistics are summarised in a diagram, which illustrates very well sundry commonplaces. From what has been said above it follows that

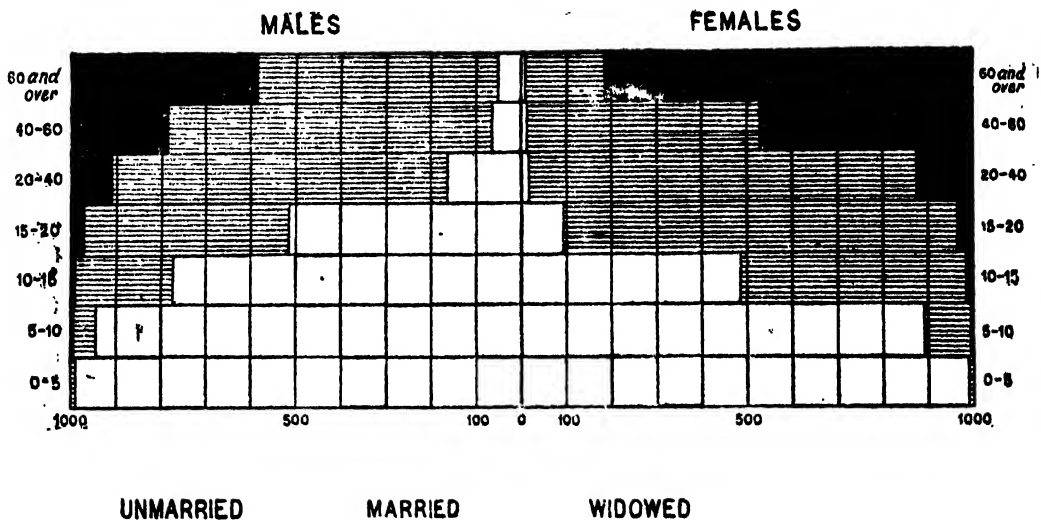


Diagram showing, for each sex, Distribution by Civil Condition per 1,000 at different age periods.

its lower part illustrates realities only in the right hand bottom corner, but these realities are sufficiently tragic. Out of every thousand girls aged under five there are 7, and out of every thousand aged under ten there are 102, who are married and have a reasonable chance of never seeing their husbands. And out of every thousand aged under ten there are 4 widows whose married life—in very many cases—is finished before it has begun.*

To consider the more real portion of the diagram, it will be seen that almost everyone who in Europe would be considered to be of marriageable age is or has been married. Women are of course known to marry earlier than men; the diagram shows that at age 10—15 more than half the living females and less than a quarter of the living males are already married. At age 15—20 only 95 women per thousand are still unmarried and after 20 few more than the sum total of those physically incapacitated and of prostitutes. Of men just over half are still unmarried at age 15—20, and between 5 and 6 per cent. remain unmarried to the end. Parents are less careful about marrying off their sons than about marrying off their daughters, and the older a man gets the harder it is for him to find a wife. This fact combined with the preponderance of males at all ages after infancy, and with a small amount of polygamy, accounts for the number, small as it is, of elderly bachelors.

Age.	Widowers	Widows
0—5 ..	0	0
5—10 ..	8	4
10—15 ..	10	16
15—20 ..	27	83
20—40 ..	91	122
40—60 ..	218	463
60 and over ..	411	812

Up to the age of 40 widows, though they outnumber widowers appreciably in every age period, outnumber them only (with the curious exception at age 10—15) by about 30 per cent. Between the ages of 40 and 60 they outnumber widowers by 125 per cent., and after the sixtieth year by nearly 100 per cent. This is largely due to the greater longevity of women after they have passed the child-bearing age, but must also point to a tendency among widowers to remarry in later life rather than in middle age.

* There are also in the province 50 widows under one year of age, and 1,285 under five—figures too small to count in a per mille proportion.

and y the lined portion on the right hand side. Then if widowers also did not remarry, a should be to $(a+b)$ as x is to $(x+y)$. But widowers do remarry: and remarried widowers number per thousand of all conditions $\left(\frac{x}{x+y} - \frac{a}{a+b}\right) \times (a+b)$. The three conditions postulated are of course not fulfilled. But the degree by which they fail to be fulfilled can be calculated on the census statistics in the case of the first two and approximately on what is known of caste customs in the case of the third. A formula therefore could be worked out by any mathematician possessed of unlimited patience and much leisure—if he thought it worth while. The formula stated, which assumes that no adjustments are necessary, gives 363 remarried out of 534 married males.

Married males at all ages number 458 per thousand, and married females 510. The disparity is obviously accounted for to a very large extent by the earlier age at which girls are married. Some small part of it may be due to the return as married of women whom Mrs. Grundy would not consider to be such. Little can be left to represent the prevalence of polygamy. In fact polygamy is uncommon. For the bulk of the population it is ruled out by economic considerations. Among the classes influenced by western ideas there is probably a tendency to regard it with disfavour. It is frequent among territorial chieftains, and among the well-to-do in cases where there is no male issue to the first marriage. Even here however it is usually conditional on the consent of the first wife. The only people with whom I know it to be the rule are the land-owning Thakurs of the Jhansi district, who in most cases have three wives.

3. In order to compare the general statistics of this and of the last census Subsidiary Table I should be examined. It will be seen that at all ages combined fewer persons of each sex are married than in 1911. The proportion of unmarried men and of widows is practically unchanged. Widowers and unmarried women on the other hand are proportionately much more numerous than before.

The General Statistics compared with those of 1911.

It is clear that the number of the married has decreased in the case of each sex owing to a different cause. As regards males, the change in the proportions is readily explained as due to the heavy mortality towards the end of the decade. This mortality was most severe among people in the prime of life, and as has already been seen widowers appear to remarry after rather than before their fortieth year. As regard females, the increase in the ranks of the unmarried is remarkably large at the age period 10—15 and occurs almost wholly in the period 10—20. The cause is undoubtedly economic. The abrupt rise in the cost of living has necessitated a postponement of marriages among the professional classes, whose marriage age for girls is high: as Mr. Blunt showed in 1911.* At the lower age period 5—10, at which the relatively prosperous labouring classes generally marry their daughters, the marriage rate has not been affected.

There is an appreciable decrease in the number both of boys and of girls who are married before the completion of their fifth year; and this may point to some success on the part of social reformers.

4. Civil Condition by Natural Divisions—and also by Religion—is exhibited in a convenient form in Subsidiary Table II. This table, whose preparation was a most laborious process (the statistics for the Imperial Tables having been compiled originally for Administrative not for Natural Divisions), contains material for a demographic study far beyond the scope of this report. It is possible here only to draw attention to certain salient features.

Civil Condition by Natural Divisions.

The age of marriage is, generally speaking, appreciably higher in the Western than in the Central and Eastern Divisions. In the hills (Himalaya West) marriage takes place much later than elsewhere, but in the end is also much more universal; at the advanced ages not only are exceptionally few persons unmarried, but also exceptionally few are widowed. This state of affairs was also revealed by the statistics of 1911: but the striking disappearance of infant (0—5) marriage is a new phenomenon. Marriage is also relatively late in Sub-Himalaya West and the Western Plain; but unlike the hills, these divisions have also the greatest proportion of widowers (though not of widows). Women are married much

later than elsewhere in the Western Plain, where also unmarried women are most numerous. Early marriage is most prevalent in the Central and Eastern Plain and in East Satpuras; less prevalent, but more so than in the West, in Sub-Himalaya East.

At what may be called the effective age (15—40) males are most married in

Sub-Himalaya East, where very few are widowed; and in East Satpuras, where fewest are unmarried. Males are least married in Sub-Himalaya West and the Western Plain, in which divisions the number of bachelors is abnormal. Females are most married in Himalaya West and Sub-Himalaya East, where widows are few; and least so in East Satpuras and the Plateau, where widows are very numerous. The local distribution of widows I would

Civil Condition at effective age (15-40) per 1000 of each sex.

Natural Division.	Males.			Females.		
	Un	Marri	Widow	Unmarried.	Married.	Widowed.
Himalaya West ..	264	695	41	27	857	86
Sub-Himalaya West	266	649	85	38	803	99
Indo-Gangetic Plain West	271	644	85	32	864	104
Indo-Gangetic Plain Central	240	682	78	34	860	106
Central India Plateau	221	695	84	17	848	135
East Satpuras ..	195	729	76	34	835	181
Sub-Himalaya East	201	737	62	29	876	85
Indo-Gangetic Plain East	205	711	84	24	855	121

attribute to the fact that in the two first named divisions tillage is less arduous and in the two last named divisions is more arduous than elsewhere in the province: male longevity being largely dependent on the degree of exertion and exposure involved in agriculture. Widows continue to be most numerous in the Plateau and East Satpuras (and also in the Eastern Plain, where the water level is generally low) at the latest age period. Unmarried females aged 15 to 40 are most numerous in Sub-Himalaya West.

To compare conditions with those prevailing in 1911, there are, at all ages combined, more widowers in every Natural Division. The obvious reason for this—heavy mortality towards the close of the decade—has already been stated. There are also more widows everywhere except in the Plateau, East Satpuras, and the Eastern Plain. As regards the exceptions I can only suggest that in these tracts life is at the best of times hard for the cultivator and male mortality is comparatively independent of epidemics. More females are unmarried everywhere except in the hills: this is clearly due to the rise in the cost of living. Unmarried males are also more numerous everywhere except in the hills, in Sub-Himalaya West and in the Central Plain. The hills are too self-contained to react quickly or noticeably to general economic conditions, and in the other two divisions the decrease in the proportion of bachelors is trifling.

Civil
Condition
by Religion.

5. As would be anticipated, there are at all ages combined many more unmarried of both sexes among Muhammadans than among Hindus. This is of course owing to the higher age at which Muhammadans generally marry. The Muhammadans also have fewer widowers, doubtless because their men are more prone to postpone marriage till late in life: at age 15—40 unmarried male Hindus number 237, Muhammadans 252; at age 40 and over Hindus number 67, Muhammadans 35; and in late marriages the wife is usually much the younger

partner. The relatively small figure for Muhammadan widows is obviously due to the fact that widow remarriage is permitted to all Muhammadans, but only to some Hindus. Though for both sexes marriage takes place among Muhammadans later throughout than among Hindus, yet in the end marriage is even more universal for Muhammadan than for Hindu males, and almost as universal for Muhammadan as for Hindu females. The marginal statement illustrates what has been said in this paragraph.

Number per 1,000 who are or have been married.				
Age period.	Males.		Females.	
	Hindu.	Muham- madan.	Hindu.	Muham- madan.
0-5 ..	5	4	7	6
5-10 ..	58	30	111	75
10-15 ..	236	152	537	489
15-40 ..	763	748	978	949
40 and over ..	993	965	992	985

Of other religions the least married are naturally the Christians. The figures for these are largely determined by the European community, and require no comment. The figures for Jains indicate as usual that for both sexes marriage is contracted late and is of short duration: moreover according to oriental standards, by males it is contracted infrequently. I can find no explanation of those phenomena, which however account for the great decrease in the Jain population. Aryas are less married, in the case of each sex, than Hindus; which may be accounted for by the stand taken by the Samaj against immature marriage, though the figures do not otherwise suggest that practice is in accordance with principle.

If the statistics be compared with those of 1911, it will be seen that infant (0—5) marriage has decreased in all communities. At age 5—10 marriage is practically as frequent as before, except in the case of the Jains. At age 10—15 there are substantially fewer persons married in all religions. This may be due to reform, but as already suggested, is more probably due to economy. At the later ages the figures have not altered materially. As before, unmarried Arya males aged 40 and over are numerous. Marriage appears to be more distasteful and disastrous than ever to Jains.

Statistics by natural divisions are differentiated only for the two main religions. These show the same differences in each division as in the whole province, save that, as in 1911, Muhammadans are earlier married and more married than Hindus in Sub-Himalaya East. Muhammadans also appear to be earlier married than Hindus in Himalaya West, but the Muhammadans in this division are practically all immigrants, and the figures therefore do not represent here what they represent elsewhere.

6. Civil condition by caste is shown in Subsidiary Table V. The statistics are not very illuminating, but corroborate two findings at which Mr. Blunt arrived in 1911: firstly that the highest castes have the fewest married males, and secondly that, generally speaking, the higher the caste the later the age of marriage. Unmarried males are most numerous in the case of Bhuinhars (509), Kayasths and Saiyids (504), Gujars (502) and Rajputs (501): and least numerous in the case of Kurmis (383), Kumhars (402), Pasis (410), Gadariyas and Koeris (412), and Chamars (413). The reason hitherto given for the comparative prevalence of bachelordom in the higher castes is the comparative scarcity of women. This reason is not very convincing. Among the Bhuinhars for instance the proportion of women to men is high (954 to 1,000): among Kurmis it is low (906). The explanation probably lies rather in the fact that the marriage of boys of the higher castes tends to be postponed in the interests of school-going.

Unmarried females are most numerous in the case of the Kumhars (402), Saiyids (384), Shaikhs (377), and Kayasths (362): and least numerous in the case of Kurmis (273), Brahmans (310), Koeris (313), Lodhas (314), and Rajputs and Kalwars (315).

The proportion of children under 12 who are married gives some idea as to the communities which favour relatively early and relatively late marriage. This proportion is highest, for boys, among the Kurmis (211), Pasis (139), Kumhars (134), Ahirs (129), and Chamars (122): and for girls among the same castes in practically the same order. It is lowest for boys among the Saiyids (25), Rajputs (32), Kayasths (34), Shaikhs and Gujars (38): and for girls among the Saiyids (53), Agarwals (57), Kayasths (60), Bhuinhars (70), Shaikhs (86), and Jats (87). The reason for these variations is, I think, clearly connected with school-going: a reference to Subsidiary Table VI of Chapter VIII will show, for instance, that the Saiyids, Agarwals, and Kayasths have a far higher proportion of literate women than any other caste.

It will be noticed that in respect of both sexes the Kurmis are the most married and the earliest married of all castes.

Lastly, the proportion of widows gives a rough grading of the castes, from those that absolutely forbid the remarriage of women, through those that permit but discountenance, to those who accept it as the rule. Widows are most numerous among the Bhuinhars (240), Brahmans (234), Kayasths (210), Rajputs (209), and Agarwals (203): least numerous among the Kumhars (102), Julahas (131), Shaikhs (144), Pasis (146), Bhangis and Lunias (150), and Chamars, Dhobis, Lohars, and Telis (158). The figures suggest a tendency among the lowest castes to regard widow remarriage with increasing disfavour.

*Civil
Condition by
Caste.*

The Pasis, Bhangis, Chamars, and Dhobis all have appreciably more widows than they had ten years ago. This is the outcome of the desire common to all but the very highest castes to raise themselves in the social scale: a desire which it is sought to accomplish generally by imitative methods.

Subsidiary table I.—*Distribution by Civil Condition of 1,000 of each sex, religion, and main age-period at each of the last five censuses.*

Religion, sex and age.	Unmarried.					Married.					Widowed.				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
All Religions—															
Males (all ages) ..	452	449	449	450	453	457	472	454	486	485	91	79	67	64	62
0-5 ..	995	998	993	996	977	5	7	6	4	22	0	0	1	0	1
5-10 ..	946	950	944	955	977	51	48	54	43	23	3	2	2	2	2
10-15 ..	778	778	755	752	782	212	214	238	242	210	10	8	7	6	8
15-20 ..	514	501	487	483	504	459	475	495	501	473	27	24	18	16	23
20-40 ..	166	168	166	166	161	743	758	775	778	777	91	74	59	56	62
40-60 ..	65	67	78	60	55	717	745	762	785	799	218	188	165	155	146
60 and over ..	55	56	57	45	45	534	563	591	614	629	411	381	352	341	325
Females (all ages) ..	317	305	308	308	301	510	523	522	525	528	173	172	170	167	171
0-5 ..	993	989	990	993	948	7	10	9	6	51	0	1	1	1	1
5-10 ..	894	894	887	898	948	102	101	110	99	550	4	5	3	3	3
10-15 ..	488	465	448	415	439	496	521	540	574	550	16	14	12	11	11
15-20 ..	95	81	99	62	74	870	886	873	912	878	35	33	28	26	28
20-40 ..	16	16	23	12	10	882	838	862	885	881	122	116	115	108	109
40-60 ..	10	11	12	7	5	522	518	528	539	534	468	471	460	454	461
60 and over ..	9	11	10	5	4	179	189	179	169	169	812	820	811	826	827
Hindus—															
Males (all ages) ..	449	446	446	448	450	459	475	486	488	486	92	79	68	61	64
0-5 ..	995	993	993	993	976	5	7	6	4	23	0	1	1	0	1
5-10 ..	942	947	944	952	976	53	51	56	46	23	3	2	0	2	1
10-15 ..	764	767	743	741	771	226	225	250	253	221	10	8	7	6	8
15-20 ..	490	488	475	470	491	473	489	507	514	485	28	23	18	16	24
20-40 ..	166	169	166	166	160	742	757	775	777	778	92	74	59	57	62
40-60 ..	69	71	76	63	60	709	738	755	779	793	222	191	169	158	147
60 and over ..	59	61	60	48	50	527	556	582	607	620	414	383	358	345	330
Females (all ages) ..	310	299	301	307	297	511	525	524	528	531	179	176	175	170	172
0-5 ..	993	989	990	994	946	7	10	9	6	53	0	1	1	0	1
5-10 ..	889	889	881	894	946	107	103	115	104	509	4	5	4	2	2
10-15 ..	463	444	423	395	419	520	541	562	594	509	17	15	12	11	12
15-20 ..	81	70	89	53	64	882	896	881	920	907	37	34	30	27	29
20-40 ..	14	14	21	9	8	869	865	861	884	881	127	121	119	107	111
40-60 ..	9	9	12	5	4	513	510	519	535	531	478	481	469	440	465
60 and over ..	8	9	8	4	3	172	165	175	163	167	820	826	817	830	830
Muhammadans—															
Males (all ages) ..	470	463	467	460	462	447	462	473	480	479	83	75	60	60	59
0-5 ..	996	994	995	996	987	4	5	4	4	12	0	1	1	0	1
5-10 ..	970	968	959	973	987	29	30	39	25	12	1	2	2	2	1
10-15 ..	818	838	825	826	847	145	155	170	170	147	7	7	5	4	6
15-20 ..	598	580	566	561	581	379	398	419	425	398	23	22	15	14	21
20-40 ..	153	153	156	149	149	763	774	790	797	792	84	73	54	54	59
40-60 ..	35	42	54	32	32	771	787	807	827	838	194	171	139	141	130
60 and over ..	33	34	43	24	25	576	600	640	658	678	391	366	317	318	297
Females (all ages) ..	356	342	341	333	328	501	513	510	514	511	143	145	149	153	161
0-5 ..	994	992	992	993	964	6	8	8	6	35	0	0	0	1	1
5-10 ..	925	919	916	925	964	72	77	82	73	35	3	4	2	2	2
10-15 ..	611	572	572	538	565	379	419	419	456	428	10	9	9	6	7
15-20 ..	164	137	150	115	130	812	840	830	867	819	24	23	20	18	21
20-40 ..	24	27	35	22	22	887	888	879	896	887	89	85	86	82	91
40-60 ..	15	18	18	14	14	580	573	576	570	553	405	409	406	418	438
60 and over ..	15	18	28	12	12	217	198	200	186	179	768	784	782	802	809

Subsidiary table II.—*Distribution by Civil Condition of 1,000*

Religion and Natural Division.	Males.														
	All ages.			0—5.			5—10.			10—15.			15—40.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
United Provinces—															
All religions	452	437	91	995	5	0	946	51	3	778	212	10	241	682	77
Hindus	449	439	92	995	5	0	942	55	3	764	226	10	237	688	80
Muhammadans	470	447	83	996	4	0	970	29	1	848	145	7	252	678	70
Aryas	477	420	103	995	3	2	988	15	2	878	111	11	282	642	76
Christians	533	398	69	997	3	0	981	18	1	833	162	5	411	534	55
Jains	487	372	131	995	3	1	985	19	2	935	61	4	324	587	89
<i>Himalaya, West—</i>															
All religions	457	438	55	1,000	0	0	982	18	0	886	111	3	264	695	41
Hindus	458	490	52	1,000	0	0	982	18	0	880	112	2	258	705	37
Muhammadans	420	480	100	999	1	0	968	29	3	863	125	12	298	655	87
<i>Sub-Himalaya, West—</i>															
All religions	465	437	98	998	2	0	976	23	1	820	171	9	266	649	85
Hindus	462	437	101	999	1	0	975	24	1	805	186	9	264	648	88
Muhammadans	476	435	89	998	2	0	977	22	1	858	134	8	270	659	71
<i>Indo-Gangetic Plain, West—</i>															
All religions	482	417	101	998	2	0	986	13	1	876	118	6	271	644	85
Hindus	482	414	104	998	2	0	988	11	1	872	123	6	273	642	85
Muhammadans	483	428	89	997	3	0	973	26	1	898	97	5	282	647	71
<i>Indo-Gangetic Plain, Central—</i>															
All religions	426	477	97	992	8	0	910	85	5	720	267	13	240	682	78
Hindus	430	481	99	992	8	0	900	94	6	696	290	14	232	688	80
Muhammadans	470	447	85	995	5	0	975	24	1	876	116	6	260	663	68
<i>Central India Plateau—</i>															
All religions	457	455	88	994	6	0	947	49	4	715	272	13	221	695	84
Hindus	455	456	89	994	6	0	946	50	4	706	281	13	215	700	85
Muhammadans	466	456	78	990	9	1	973	26	1	845	146	9	255	677	68
<i>East Satpuras—</i>															
All religions	437	483	80	992	7	1	906	90	4	682	304	14	195	729	76
Hindus	436	484	80	994	6	0	904	92	4	672	313	15	193	730	77
Muhammadans	457	468	75	988	10	2	936	62	2	813	179	8	223	710	67
<i>Sub-Himalaya, East—</i>															
All religions	442	489	69	995	5	0	944	54	2	749	243	8	201	737	62
Hindus	442	488	70	995	5	0	942	57	1	754	238	8	207	731	62
Muhammadans	441	496	63	993	7	0	956	42	2	722	270	8	196	775	59
<i>Indo-Gangetic Plain, East—</i>															
All religions	439	467	94	993	7	0	914	82	4	677	308	15	205	711	84
Hindus	436	469	95	993	7	0	908	88	4	661	323	16	201	708	96
Muhammadans	476	456	88	995	4	1	970	28	2	814	178	8	196	731	78

of each sex at certain ages in each religion and natural division.

40 and over.			All ages.			Female.									10 and over.		
						0—5.			5—10.			10—15.			15—40.		
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
62	676	262	317	510	173	993	7	0	894	102	4	488	196	16	31	803	103
67	600	264	310	511	179	993	7	0	889	107	4	463	520	17	17	814	109
35	722	243	356	501	143	991	6	0	925	72	3	611	379	10	51	872	77
81	603	316	344	487	169	995	5	0	962	35	3	678	310	12	42	842	116
50	718	232	405	477	118	994	5	1	916	53	1	656	339	5	142	793	65
129	495	376	344	433	223	993	5	2	980	10	4	691	198	11	42	792	16
26	808	166	308	540	152	999	1	0	929	70	1	459	529	12	27	887	86
25	815	160	305	543	152	999	1	0	938	61	1	445	542	12	24	889	87
39	713	248	337	518	145	996	1	0	919	79	2	611	373	16	43	877	80
65	660	275	326	506	168	997	3	0	919	79	2	530	447	13	38	813	99
77	642	283	314	509	177	998	3	0	913	85	2	494	492	14	33	856	111
35	768	257	357	496	147	995	5	0	931	67	2	643	318	9	50	870	80
77	622	301	338	491	171	997	3	0	953	45	2	511	418	11	32	864	104
66	606	308	329	495	176	997	3	0	95	46	2	508	480	12	17	891	82
39	708	253	371	489	140	996	4	0	154	44	2	660	333	7	51	869	80
66	672	262	297	524	179	991	9	0	854	110	6	471	510	19	21	860	106
70	664	266	289	527	184	989	10	1	815	148	7	414	535	21	28	838	134
39	716	245	348	504	148	993	7	0	915	82	3	615	316	9	63	858	79
76	666	258	299	500	201	990	9	1	861	135	4	361	614	22	17	848	135
79	661	260	296	502	202	990	9	1	856	141	4	351	626	23	15	849	136
35	738	227	332	478	190	987	11	2	902	73	5	536	448	16	39	848	113
65	708	227	313	505	182	990	9	1	837	154	9	315	568	27	34	835	131
67	705	228	310	506	184	991	9	0	834	156	10	398	576	26	34	833	133
44	736	220	356	491	153	983	11	4	885	111	4	50	477	27	33	869	98
39	754	207	325	513	162	991	9	0	898	98	4	526	440	14	29	876	95
42	749	209	322	510	163	991	9	0	898	98	4	533	451	13	28	872	100
24	784	192	343	525	132	994	6	0	898	99	3	488	490	16	36	894	70
51	680	269	313	504	183	990	9	1	843	151	6	389	588	23	24	855	121
54	676	270	307	503	188	990	9	1	836	157	7	372	603	25	23	852	125
25	709	206	361	497	142	992	8	0	900	97	3	536	452	12	35	885	80

Subsidiary Table I.—*Distribution by main age-periods and Civil Condition of 10,000 of each sex and main religion.*

Religion and age.			Males.			Females.		
			Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
<i>All religions</i>	..	..	4,521	4,568	911	3,173	5,093	1,734
0-10	..	..	2,476	77	4	2,531	151	6
10-15	..	..	948	259	12	497	505	16
15-40	..	..	957	2,712	307	123	3,419	420
40 and over	..	..	140	1,520	588	22	1,018	1,292
<i>Hindus</i>	..	..	4,481	4,592	921	3,100	5,112	1,788
0-10	..	..	2,462	84	4	2,505	159	6
10-15	..	..	925	273	12	468	524	17
15-40	..	..	947	2,731	314	107	3,423	440
40 and over	..	..	150	1,571	591	20	1,006	1,225
<i>Muhammadians</i>	..	..	4,698	4,169	833	3,562	5,007	1,431
0-10	..	..	2,567	45	2	2,677	112	4
10-15	..	..	1,081	185	9	652	404	11
15-40	..	..	971	2,605	270	200	3,401	200
40 and over	..	..	79	1,634	552	33	1,088	1,116

Subsidiary Table IV.—*Proportion of the sexes by Civil Condition at certain ages for religions and natural divisions.*

Religious and natural divisions.	Number of females per 1,000 males.														
	All ages			0—10			10—15			15—40			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
United Provinces—															
All religions	637	1,013	1,730	930	1,778	1,453	477	1,771	1,250	116	1,116	1,240	143	608	1,396
Hindus	629	1,002	1,760	927	1,721	1,428	460	1,743	1,276	103	1,110	1,273	120	608	2,028
Muhammadans	692	1,021	1,566	951	2,284	1,723	549	1,987	1,070	187	1,192	1,015	390	607	1,812
Aryas	586	941	1,327	884	2,020	1,333	535	1,925	810	117	1,040	1,215	83	618	1,393
Jains	584	983	1,437	943	1,236	2,666	573	3,765	2,185	106	1,100	1,523	10	594	1,393
Christians	638	1,007	1,444	920	2,606	2,272	616	1,782	724	263	1,128	893	737	798	1,782
Himalaya, West—															
All religions	627	1,033	2,557	971	3,268	1,545	450	4,180	4,038	95	1,177	1,927	172	555	2,805
Hindus	635	1,056	2,780	975	3,548	4,760	413	4,270	5,060	89	1,205	2,227	138	515	2,990
Muhammadans	513	716	926	922	2,126	930	568	2,128	961	79	778	500	102	368	1,226
Sub-Himalaya, West—															
All religions	607	1,000	1,492	907	2,960	1,265	485	1,925	1,056	121	1,118	1,002	103	591	1,782
Hindus	583	997	1,504	891	3,037	1,436	445	1,916	1,153	103	1,105	1,051	73	600	1,781
Muhammadans	667	1,011	1,473	937	2,716	1,576	572	1,980	823	165	1,175	1,003	204	577	1,806
Indo-Gangetic Plain, West—															
All religions	591	996	1,353	936	2,804	1,645	436	2,690	1,228	99	1,112	1,013	136	588	1,585
Hindus	572	999	1,422	901	3,494	1,603	403	2,714	1,907	80	1,100	1,081	122	612	1,536
Muhammadans	673	1,004	1,385	959	1,560	1,828	562	2,630	1,064	57	1,172	991	290	585	1,677
Indo-Gangetic Plain, Central—															
All religions	641	1,012	1,700	932	1,480	1,197	593	1,464	1,162	129	1,165	1,272	144	629	1,972
Hindus	633	1,007	1,702	928	1,423	1,195	493	1,421	1,167	114	1,154	1,591	110	569	2,125
Muhammadans	697	1,057	1,666	958	2,992	1,914	538	2,195	1,072	229	1,301	1,120	550	618	1,871
Central India Plateau—															
All religions	612	1,027	2,128	897	2,436	962	401	1,786	1,345	71	1,122	1,483	148	562	2,572
Hindus	610	1,032	2,119	892	2,440	889	393	1,762	1,340	65	1,122	1,478	131	564	2,562
Muhammadans	668	982	2,187	967	2,390	2,800	495	2,400	1,306	136	1,128	1,485	606	522	2,768
East Satpuras—															
All religions	715	1,046	2,093	963	1,630	1,917	507	1,596	1,565	181	1,176	1,758	290	603	2,052
Hindus	712	1,051	2,313	958	1,626	2,050	506	1,572	1,591	181	1,181	1,786	149	605	2,088
Muhammadans	739	1,000	1,942	1,023	1,747	1,773	511	2,155	2,918	133	1,117	1,327	1,066	583	2,264
Sub-Himalaya East—															
All religions	704	1,003	2,245	950	1,615	1,945	550	1,485	1,360	137	1,133	1,470	173	612	2,700
Hindus	697	1,003	2,286	950	1,587	2,252	557	1,506	1,357	118	1,133	1,517	157	696	2,538
Muhammadans	738	1,006	1,984	940	2,024	1,566	509	1,385	1,374	211	1,130	1,167	311	652	2,467
Indo-Gangetic Plain, East—															
All religions	690	1,049	1,893	915	1,678	1,987	450	1,494	1,183	122	1,213	1,137	165	605	2,138
Hindus	682	1,039	1,914	913	1,617	1,927	439	1,462	1,181	111	1,195	1,286	140	603	2,023
Muhammadans	757	1,152	1,624	960	3,284	1,270	555	2,090	1,167	203	1,378	1,230	663	626	1,725

Subsidiary Table V.— *Distribution by Civil Condition of 1,000*

Distribution of 1,000 males of each age by civil condition.

Castes.	All ages.			0—5.			5—12.			12—20.			20—40.			40 and over.		
	Males.			Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unma.	W.	Widowed.	Unma.	Wid.	Unma.	Wid.	Unma.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Brahman	455	412	133	989	9	2	937	58	5	609	356		213	607	120	97	546	357
2. Rajput	501	403	96	989	8	3	963	32	5	709	269		253	557	90	120	618	252
3. Sonar	465	424	111	977	20	3	912	54	4	629	328	43	201	691	105	92	599	369
4. Shaikh	471	438	91	969	24	7	956	38	6	721	242	37	177	735	88	43	713	244
5. Kayasth	504	383	113	987	11	2	959	31	7	767	202	31	276	626	98	123	578	299
6. Chamar	413	500	87	986	11	3	870	122	8	462	494	11	83	824	93	37	710	243
7. Kahar	452	452	96	986	17	3	933	63	4	602	360	38	133	763	104	46	692	262
8. Pathan	486	428	86	975	23	2	917	47	6	759	219	22	210	702	88	48	721	228
9. Gadariya	412	476	112	982	11	4	891	103	6	491	436		111	766	123	49	650	301
10. Kumhar	402	496	102	984	11	2	858	134	8	456	500		98	790	112	46	683	271
11. Dhobi	432	470	98	986	11	3	912	83	5	538	416		115	782	103	44	676	280
12. Lohar	425	463	112	985	12	2	905	87	8	527	421		142	759	119	56	660	281
13. Nai	449	447	104	987	11	2	936	59	5	611	351		141	747	112	50	666	281
14. Saiyid	504	415	81	976	23	1	971	25	4	812	169		235	688	77	55	726	219
15. Barhai	436	449	115	982	15	3	912	61	7	588	370		150	736	115	62	636	302
16. Julaha	445	465	90	991	8	1	925	70	5	396	29		107	801	92	30	709	261
17. Teli	423	477	100	982	17	1	909	87	4	518	442	40	121	769	110	47	683	270
18. Lodha	421	467	112	978	14	8	911	80	9	503	418	49	131	751	118	55	647	297
19. Bhabhunja	437	450	113	984	11	2	918	76	6	581	372	47	164	718	118	68	643	289
20. Kalwar	420	471	109	988	10	2	912	81	7	510	425	45	146	739	115	61	669	270
21. Bhangi	446	447	107	977	16	7	915	75	10	540	408	52	121	757	122	55	660	285
22. Agarwal	478	387	135	980	18	2	919	46	5	672	283	45	233	641	121	140	500	360
23. Pasi	410	506	84	989	10	1	855	139	6	525	440	35	109	803	88	38	734	258
24. Ahir	421	474	105	985	13	1	864	129	8	558	438	34	147	742	111	52	651	287
25. Luniya	435	478	87	987	11	2	890	104	6	487	408		113	790	97	10	716	244
26. Kachhi	439	453	108	993	6	1	955	42	3	581	382		119	759	112	48	651	301
27. Kurmi	383	509	108	981	17	2	771	211	18	459	499		162	733	105	73	652	275
28. Gujar	502	391	107	986	12	2	958	38	4	653	310		236	661	103	110	578	312
29. Jat	489	384	127	991	7	2	958	39	3	603	349		233	636	131	99	548	
30. Bhuihar	509	379	112	978	27	..	958	39	3	676	285		294	609	97	123	564	313
31. Koori	412	482	106	990	10	..	890	105	5	477	481		119	761	120	35	684	281
32. Anglo-Indian	704	256	40	1,000	..	..	1,000	..	..	951	45		504	459	37	233	616	151
33. Indian Christian.	557	364	79	998	2	..	962	38	..	646	334	20	398	510	92	44	717	239

of each sex at certain ages for selected castes.

Distribution of 1,000 females of each age by civil condition.

All ages.			0-5			5-12			12-20			20-40			40 and over.		
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
310	456	234	988	10	2	885	107	8	495	618	57	19	778	103	10	384	606
315	476	209	990	8	2	889	103	8	272	673	55	17	801	177	12	415	573
350	473	177	982	11	7	871	118	11	285	652	61	34	818	118	25	114	531
377	479	144	993	6	1	909	86	5	391	577	19	11	814	95	25	488	487
362	428	210	990	8	2	935	60	5	341	613	15	15	790	185	14	112	474
318	524	158	982	11	1	779	212	9	191	761	38	15	869	116	9	464	527
345	492	163	981	15	3	816	127	7	159	691	17	16	851	123	15	465	520
358	479	163	973	11	16	897	95	8	399	519	32	36	861	119	21	491	488
316	518	166	987	11	2	791	196	10	188	712	50	18	850	132	12	413	525
402	496	102	184	14	2	743	215	2	185	760	55	21	861	118	19	470	511
335	507	158	976	19	5	830	163	7	234	712	51	23	858	119	16	471	513
334	508	158	985	13	2	835	158	7	211	713	46	25	858	117	15	463	502
338	495	167	988	10	2	869	123	8	263	695	42	20	853	127	14	155	531
384	450	166	990	8	2	941	53	3	493	176	31	42	816	122	20	477	503
332	502	166	991	8	1	877	118	5	212	701	54	20	859	121	17	471	512
352	517	131	987	11	2	825	171	4	271	707	22	20	899	81	12	513	475
325	517	158	981	18	1	811	183	6	211	745	41	24	859	117	14	462	524
314	514	172	975	20	5	802	173	25	211	711	47	13	811	116	10	415	515
338	500	162	988	10	2	811	152	7	263	690	47	33	869	128	18	469	503
315	502	183	976	21	3	821	169	10	241	706	51	27	810	133	18	444	538
353	497	150	982	12	6	841	150	9	254	676	70	40	814	116	27	475	498
358	439	203	978	14	8	914	57	9	323	606	71	30	781	186	20	407	573
319	535	146	991	8	1	761	230	6	251	711	27	18	866	116	11	511	478
316	519	165	985	13	1	776	217	7	260	703	37	17	814	119	11	471	518
351	499	150	989	10	1	828	166	6	241	691	63	32	818	110	11	510	476
324	500	176	992	6	3	611	147	9	197	761	39	16	816	128	11	436	553
273	539	188	979	19	2	619	319	12	212	751	37	20	816	154	11	151	535
333	499	168	975	21	4	885	109	6	160	686	54	11	857	121	17	157	526
348	492	160	980	18	2	906	87	7	276	678	16	31	817	122	21	477	499
323	437	240	990	10	..	927	70	3	313	611	13	16	757	127	13	577	610
313	511	176	983	15	2	800	190	10	191	713	63	17	818	135	13	491	526
553	342	105	1,000	..	..	1,000	..	..	851	121	25	137	672	91	222	442	336
391	494	115	994	5	1	895	104	1	356	631	11	61	851	85	20	513	427

Chapter VIII.—LITERACY

The statistics of literacy are shown in Imperial Tables VIII and IX. These give the figures, the former by locality, religion and age, the latter for certain castes selected to represent all grades of society. Subsidiary Tables I to VI summarise the statistics in a form more easily intelligible, and Subsidiary Table VII reproduces certain relevant returns of the Education Department.

*The Statistics
of Literacy
where
exhibited.*

2. At the present census, as in 1911 and 1901, the whole population was distinguished as either "literate" or "illiterate." Before 1901 a triple distinction—of which the unsoundness has been explained in previous reports—was made between those "learning," "literate" or "illiterate." In consequence no satisfactory comparison is possible between the statistics of this and of the last century. The figures of 1901 are moreover vitiated for comparative purposes for a different reason. In that year no definite criterion of literacy was prescribed. A clear definition was first adopted in 1911, and ran as follows:—"Those only are literate who can write a letter to a friend and read the answer to it." This definition was maintained in 1921. No attempt was made at the present census to distinguish literacy in Urdu and in Hindi.

*Literacy how
defined.*

3. The statistics may safely be accepted as accurate. The definition was simple, and everywhere I found it understood. Human nature in one respect tended to exaggerate the figures of literacy, but in another tended to keep them down. A man who can merely scrawl a signature, or can merely spell out laboriously a clearly written sentence, naturally prefers a claim to literacy—especially in these the nursery days of democracy, when every coolie carries a minister's portfolio in his loin cloth: the enumerator, who does not wish to make his own literate status too cheap, as naturally resists it. The opposite party being also the judge, the claim if not good is unlikely to succeed.

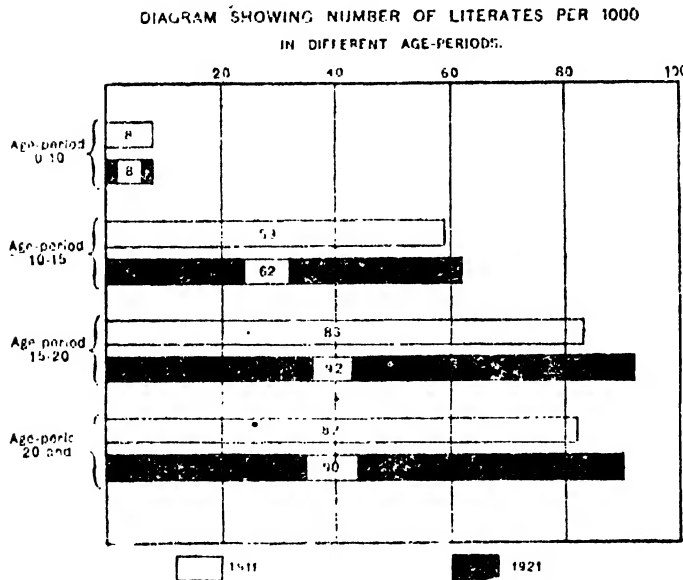
*The accuracy
of the
statistics.*

4. There are now out of every thousand of the population, 37 literate persons: out of every thousand males, 65: and out of every thousand females, 6. The figures in 1911 were 34, 61 and 5 respectively. The progress of education during the decade as here revealed must be disappointing to the many who have devoted their energies to the furtherance of it. The statistics indeed show a slightly greater advance for males—though a much smaller advance for females—for this than for the previous decade. The figures for 1901 were 58 per thousand for males, and 2 per thousand for females: but as already explained these figures are vitiated by the absence of a definition of literacy before 1911, and are almost certainly too high. The advance would certainly have been greater had not the influenza epidemic—as is shown in Chapter V—discriminated so markedly against persons between 20 and 35 years of age: figures have not been abstracted for this age period, but it must certainly contain a greater proportion of literates than any other of equal length. But it would be dangerous to attribute the want of educational progress to the influenza epidemic as a whole. Literates are concentrated in the well-to-do classes, and these cannot but have resisted the disease better than did the poor.

*The extent of
literacy.*

*Literacy by
age periods.*

5. The diagram below shows literacy by age periods for 1911 and 1921.



The period by which progress in the general spread of education can best be gauged is 15—20: persons in this group were children aged 10—15 in 1916, and the literates among them are those who have been under effective instruction during the preceding quinquennium. The figure for 1911 was 83 and is now 92, an increase of 9.

The returns of the Education Department show scholars attending primary schools to have numbered 470,000 in 1911, and 848,000, of whom 773,000 were boys, in 1921. The proportion per 1,000 of boys attending school to boys of school-going age was 49 in 1901, 69 in 1911, and is 124 now. This great expansion would be expected to have produced better results. That it has not done so is due to the fact that the enrolment of primary schools is largely fictitious. Every district officer knows that boys who will leave these schools before they have learnt to read and write form a big proportion of the total attendance. The parents of such a boy never seriously intend that he should be educated. They send him to school and leave him there so long as he is in the "preparatory" or even in the "lower" classes, because this is a cheap way of keeping him occupied and out of mischief: because they are pressed to do so by the schoolmaster—or even by his superiors—who want to improve the look of their returns: or perhaps in case he shows a special aptitude for learning. They take him away as soon as the expense increases, and he can make himself useful in field or at pasture.

This attitude is natural enough. What has been emphasised in the last two reports is still true of the villager, if not of the townsman. He does not desire education for his children for its own sake, but only as a means of obtaining employment. There is thus no motive for educating the boy who is destined for the plough: and it is unlikely that there ever will be till the people are given a vernacular literature worth the name. Of this there is as yet no sign. Publications continue to be multiplied, but almost all, if not religious, avowedly or otherwise deal with politics, and a large proportion are in verse. Religion and politics alone will not make a literature, and verse after all is the refuge of persons who cannot write prose.

*Cost of literacy
in terms of
public money.*

6. The census statistics are not concerned with degrees of education, but only with mere literacy, which is, generally speaking, the product of the primary schools. Literates of the age period 10-20 found in 1921 represent roughly the effective output of the primary schools for the decade. These amount to 414,000. Direct expenditure incurred on primary education during the same period was about two and a half crores. The expenditure of the previous decade cannot have been much more than one and a half crores: the figure for 1901-02 was Rs. 14,16,000, and for 1910-11, Rs. 17,75,000. Literates of the age period 10-20 numbered 389,000 in 1911. In the decade 1901-11 the cost of production of a literate was therefore Rs. 40. In the present decade the corresponding cost of production has been Rs. 60. But the additional 25,000 literates produced have cost a crore, or Rs. 4,000 each¹.

¹ These rough calculations include in cost of producing a literate in this decade expenditure on buildings which will also be used for producing literates in future decades. This is fair enough, for nothing is debited for cost of buildings used in this but paid for in previous decades.

The argument is of course, vitiated by neglect of fall in value of money. But the Education Department was not much affected thereby—in the matter of salaries and the like—till the last year or two of the decade.

The demand for literacy.

7. It has been pointed out that the statistics read with the other information available appear to indicate that literacy has failed to progress appreciably owing rather to a shortage of demand than to a shortage of supply. And it has been suggested that the demand is unlikely to increase largely until the creation of a vernacular literature furnishes motives other than those of utility for seeking vernacular education. It should be of interest therefore to indicate briefly what seem to be the limits of the demand for literacy under present conditions.

The occupations in which literacy is required are included, in the classification adopted at this and at last census, under "Trade" and "Public Administration and Liberal Arts." In 1911 the number of persons living by trade (excluding dependants) was almost exactly a million. Those employed in Public Administration and the Liberal Arts numbered 473,000. But a large proportion of the persons classified under these categories of occupation either do not require, or as a fact do not seek, to be literate: under the former, shop menials, pedlars, dealers in leather, milk, fuel and the like; under the latter, village watchmen, most of those in the police or in the army, religious mendicants, midwives and dancers. It is certainly not an understatement to say that a million inhabitants of the province at the most require literacy for utilitarian purposes. The demand for education therefore comes from the persons who will make good the casualties in this million. In Chapter V it is shown that the average age of the male population is about $23\frac{1}{2}$ years. For the well-to-do classes to which most of the literates belong the average will be higher say 25. The literate community therefore has to be completely replaced in 25 years. For a decade the replacements required are two-fifths of a million, or 400,000. It has already been seen that the effective output of literates is 414,000.

The conclusion would seem to be that present demands for mere literacy are fully met, and that the demand can only be increased appreciably by a large expansion of commerce and industry, or by the creation of purposes other than of utility to which vernacular education can be put.

8. There is not much progress to record in the matter of female education. Out of every 1000 women 2 were literate in 1901, 5 were literate in 1911, and 6 are literate now. The obstacles to progress are the same as in the past: female education is unpopular; there are no uses to which an educated woman can put her accomplishments, and qualified female teachers are almost unobtainable. As regards the last point, the number of training schools for mistresses has increased since 1911 from 17 to 27, but the number of scholars in these schools has decreased from 313 to 175. I have been told by an Inspectress of Schools that girls are incomparably better taught in boys' schools than in girls' schools: but from the former they are almost always removed before they are old enough to derive much benefit.

Female Education.

Excluding communities which are foreign to the province, female education is still negligible except among the Indian Christians and the Aryas.

9. Literacy is far more widespread in urban areas than in the country generally, as would be expected. In the

Literacy in cities.

Literates per 1,000 in cities.

Year.	Hindus.		Muhammadans.	
	Males.	Females	Males.	Females
1911	194	81	130	18
1921	221	47	154	24

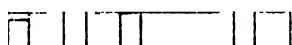
progress made since 1911 it is best to compare the figures for the two main religions. These are given in the margin, and show a considerable advance—proportionately greater for Muhammadan than for Hindu males, and for Hindu than for Muhammadan females.

24 cities, 213 men and 48 women are literate out of 1,000 of each sex. It is doubtful whether Benares or Allahabad has pride of place. The former has 289 literate men and 78 literate women; the latter has 287 and 93; Gorakhpur, with 270 and 57, stands third. The most illiterate city is Muttra, whose figures (excluding Civil Lines) are 77 and 33. To gauge the

*Literacy by
natural
divisions.*

10. Literacy by natural divisions is set out in the marginal diagram, in which also the present position is compared with that of 1911. The figures

DIAGRAM SHOWING NUMBER OF LITERATES
PER 1000 BY NATURAL DIVISIONS
POSITION IN 1911—FIRM LINE.
POSITION IN 1921—DOTTED LINE.



printed within the rectangles are those of 1921 for males only. The relative positions are the same as at last census, except that the Western has gone ahead of the Central Plain. Himalaya West is far more literate than any other division. Apart from the influence on the figures of the European population and European schools, the reason of this is social. All the people of the hills except the labouring community are of approximately equal and of fairly high social status. The Plateau and the Eastern Plain have made considerable progress. Only Sub-Himalaya East has retrogressed. Possibly here educational facilities have not kept pace with the increase of population.

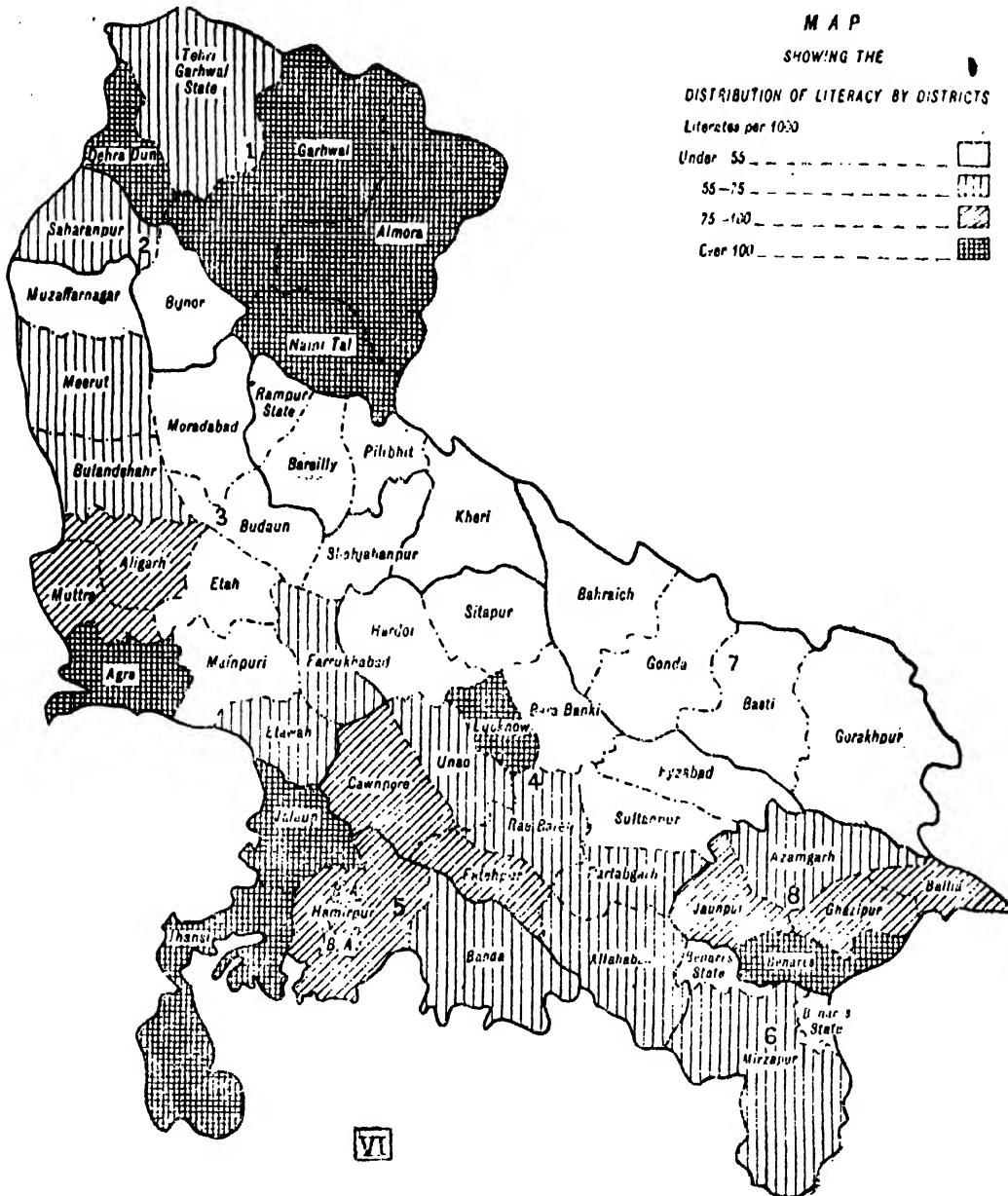
The position as regards female literacy is as shown in the margin. Hima-

Natural divisions.	Female literates, per 1,000.	
	1911	1921.
Himalaya, West ..	9	12
Sub-Himalaya, West ..	5	7
Indo-Gangetic Plain, West ..	6	8
Indo-Gangetic Plain, Central ..	5	6
Central India Plateau ..	4	6
East Satpuras ..	3	5
Sub-Himalaya, East ..	2	2
Indo-Gangetic Plain, East ..	5	7

laya West is the most advanced division as would be expected, for there the *parda* system does not stand in the way. All the divisions have advanced fairly uniformly though very slightly, except Sub-Himalaya East, which is stationary.

11. Literacy by districts is illustrated by a map. This map brings into

Literacy by districts.



relief the favourable position in respect of education enjoyed by districts having a small area but containing large cities—Agra, Lucknow and Benares—which is readily explained: also what is not readily explained, that if the Himalayas themselves be disregarded, literacy increases, roughly speaking, directly as the distance from the Himalayas. The only district within a hundred miles of the hills which is not in the lowest class is Saharanpur: and even for Saharanpur the figure is lower than the provincial average. Rampur State is more illiterate than any district. Of the districts, the most illiterate are Budaun, Bahraich and Kheri. In the Benares and Tehri-Garhwal States education appears to be less popular than in the neighbouring districts, perhaps because in the States there is a relatively less favourable market for literacy. The very high figures of Dehra Dun are not due, as might be supposed, to the large number of Europeans living in the district. The figures for Hindus alone, and for Muhammadans alone, are also exceptionally high. The explanation is to be found in the fact that about a quarter of the population is urban, and that the Dun attracts immigrants who go there for economic purposes: such immigrants tend to be of an enterprising and progressive type.

The progress of literacy by districts is strangely uneven. The majority have not varied by as much as 1 per cent. of the population, though most show increases of something less than this. The greatest advance is that of Ballia—30 per 1,000, followed by Ghazipur with 27. Naini Tal has increased by 26, but

the figure is affected by the European schools, which had begun term at this census but not at the last. Big increases are also shown by Fatehpur and Jalaun (24), Dehra Dun (18), Jhansi (17), and by Farrukhabad, Bulandshahr, Banda, Benares, Hamirpur, Meerut, Rao Bareilly (and Rampur State), with figures between 15 and 10. Ground has been lost by Garhwal (19), Bahraich (14), and by Muttra, Gorakhpur, Gonda (and Tehri-Garhwal State). There are small decreases of less than 1 per cent. in the case of Almora, Sultanpur, Fyzabad, Basti, and Mainpuri.

Variations are much more uniform when examined by administrative than when examined by natural divisions. Every district in the revenue divisions of Meerut, Rohilkhand, Allahabad, Jhansi, Benares, and Lucknow shows an advance. Agra, Gorakhpur, and Kumaon each have two retrogressive districts, and Fyzabad has four.

Literacy by religion.¹

12. Of the two main religions the Hindus have progressed more than the Muhammadans. The latter still have a greater proportion of literates of both sexes combined—38 per 1,000 to 35 of the Hindus: but as regards males only the Hindu proportion is now 67 and the Muhammadan proportion 65. In 1911 the figures were 58 and 59 respectively. As the Muhammadans have a superiority only in the age period 20 and over, it seems likely that they will in the next decade fall even further behind. As regards females, the proportion of literacy has increased from 3 to 5 for Hindus, and from 6 to 7 for Muhammadans.

Of other religions—neglecting those whose numbers are too small to be representative—the Jains have far the highest proportion of literate males—510, an increase of 40 since 1911. They are nearly all business men, for whom literacy is a necessity. The Aryas come next with 313: they have lost 71 in the decade, probably owing to the accession of converts from the depressed classes of the hills. The proportion for Christians, if Europeans be included, is 283: but Europeans are almost all literate and the figure for Indian Christians only is 108. Unfortunately the corresponding figure for 1911 is unknown.

In female literacy Christians including Europeans easily have pride of place with 182. Christians—Indian only—have the same figure (81) as Aryas; Jains following with 68. The proportion in 1911 was for Jains 52 and for Aryas 88: the reason for Arya retrogression is probably the same as in the case of males.

Literacy by caste.

13. Subsidiary Table VI, which is presented in a new form, will, I think, be found interesting. The occupational arrangement of the selected castes is, of course, only generally accurate. The Jats might be considered as landowners rather than agriculturists, the Tagas as agriculturists rather than landowners: the Sonar is perhaps as much an artisan as a money-lender, and a large proportion of the Brahmans, Mughals, and Saiyids are zamindars. Its limitations admitted, the table is illustrative of general conditions of the present day—of the prosperity of the artisan and of the small farmer; of the financial straits of the professions; of the growing culture of the landed aristocracy; and of the failure of the attempt to open schools for the depressed classes.²

To consider individual castes, the Kayasths followed by the Agarwals are still easily the most literate. The Sonars, Brahmans, and Rajputs alone have made any remarkable progress in male and the Kayasths, Agarwals, and Rajputs in female education. I cannot account for the ground lost by the Agraharis. That lost by the Saiyids must be due to the inclusion in this "caste" of many who were not included in it ten years ago.

اولاً نداف ہودم بعدہ گشتیم شیخ * غلہ چور ارزان شود اسماعیل سید میثم

The retrogression of Koris can hardly be real. This caste must, I think, have been mixed up with the Koeris in 1911.

Literacy in English.

14. Of every 10,000 of the male population, 17 were literate in English in 1891, 36 in 1901, 49 in 1911, and 66 in 1921. Put in another way, in 1891 one man in 588 could read and write English: now one in 151 can do so. Knowledge of English therefore is rare even now, but is very much more widespread than it was 30 years ago. The figures are naturally highest in the districts

¹ Subsidiary Table I of the 1911 report should be used with great caution. It was evidently prepared by someone with a fondness but no aptitude for conjecture.

² I once found a school of this kind, which had been praised in an annual report for its high enrolment, to contain, out of 35 scholars, 25 bania boys who had been attracted from the ordinary school by the prospect of not having to pay fees.

containing large cities and in those where Europeans congregate : Dehra Dun (385), Lucknow (348), Benares (242), Agra (196), Allahabad (180), Naini Tal (154), and Cawnpore (138). All these figures are much higher than those for 1911, except that of Cawnpore which is unchanged. Elsewhere the increase is general and fairly uniform, though Mirzapur and Bahraich are stationary, and Banda, Muttra, and Almora are unique in showing decreases. In the case of the two last named the decrease is large, and is due to movements of the British garrison. The districts where English is least known are as before Basti (16) and Sultanpur (19).

Of women 9 in every 10,000 are literate in English. The figure was 7 in 1911, 5 in 1901, and 3 in 1891. English-knowing women are concentrated in Dehra Dun (245) : elsewhere there is an appreciable number only in Naini Tal (60), Lucknow (54), Agra (39), and Allahabad (35). Small but scarcely measurable increases are shown almost everywhere, and only one district—Basti—fails to show even one English-knowing woman. In 1911 there were four such districts as well as two States.

Religion.	Number literate in English per 10,000 males.			
	1901.	1911.	1921.	
Hindu ..	22	29	47	Of the two main religions, the Hindus have made more advance than have the Muhammadans, but have still much leeway to make up. The Jains have progressed, but Christians and, if the figure for 1911 can be accepted as correct, the Aryas have lost much ground. English literacy among women is still negligible, except in the case of Christians (Christians, All, 1,487 : Christians, Indian, 417), Aryas (51) and Jains (20).
Muhammadan ..	38	65	81	
Arya ..	565	1,062	572	
Jain ..	150	253	384	
Christian, All ..	3,988	3,015	2,352	
Christian, Indian	507	

Of the castes, English literacy is practically a monopoly of the Kayasths (1,139 per 10,000 males), Agarwals (109), Mughals (299), Saiyids (251), and Brahmans (123). Progress is almost general, but would show if expressed as a percentage only in the case of the Kayasths. None but the Kayasths and the Agarwals can claim any perceptible increase of English literacy among their women.

Subsidiary Table I.—*Education by age, sex, and religion. (British districts.)*

f. Religion and age period.	Number per mille who are literate.			Number per 10,000 who are literate in English.			Remarks.
	Persons.	Males.	Females.	Persons.	Males.	Females.	
1	2	3	4	5	6	7	8
All religions—							
All ages (5 and over) ..	42	74	7	41	75	10	
5—10 ..	9	14	3	7	9	4	
10—15 ..	39	62	9	31·5	47·1	10·9	
15—20 ..	57	93	12	76·9	124·7	16·3	
20 and over ..	49	90	7	51·3	90	10	
Hindu, Brahmanic—							
All ages (5 and over) ..	39	70	5	49	58	2	
5—10 ..	8	13	3	2	4	5	
10—15 ..	37	60	7	21·3	35·7	2·3	
15—20 ..	54	89	9	56·3	97·5	4·1	
20 and over ..	46	84	5	33·2	63·1	2·0	
Hindu, Arya—							
All ages (5 and over) ..	229	337	93	384	643	58	
5—10 ..	85	112	54	62	101	17	
10—15 ..	263	341	151	345	538	76·7	
15—20 ..	288	397	140	615	983	115	
20 and over ..	245	377	81	428	730	55·3	
Hindu, Brahmo—							
All ages (5 and over) ..	672	735	586	1,024	4,040	4,000	
5—10 ..	400	571	182	2,400	3,571	909	
10—15 ..	812	909	600	4,375	4,550	4,000	
15—20 ..	800	715	1,000	5,000	4,288	6,667	
20 and over ..	700	741	647	4,250	4,080	4,515	
Jain—							
All ages (5 and over) ..	345	568	77	245	430	23	
5—10 ..	81	120	38	9	15	2	
10—15 ..	337	511	113	249	414	35	
15—20 ..	430	650	141	554	972	32	
20 and over ..	395	661	70	252	438	24	
Sikh—							
All ages (5 and over) ..	230	327	56	141	630	95	
5—10 ..	51	81	18	49	93	..	
10—15 ..	115	150	69	200	296	72	
15—20 ..	196	251	75	355	448	151	
20 and over ..	287	393	59	555	775	111	
Buddhist—							
All ages (5 and over) ..	137	212	18	388	635	..	
5—10 ..	40	62	..	100	312	..	
10—15 ..	108	174	..	540	868	..	
15—20 ..	118	186	42	196	371	..	
20 and over ..	160	247	18	433	700	..	
Muhammadan—							
All ages (5 and over) ..	43	74	8	50	92	38	
5—10 ..	8	12	3	3	6	6	
10—15 ..	35	54	10	26·7	44·7	3·0	
15—20 ..	54	87	14	83·4	147	5·7	
20 and over ..	53	94	9	62·3	117·5	3·0	
Christian, all—							
All ages (5 and over) ..	269	318	260	2,220	2,649	1,704	
5—10 ..	132	132	133	908	917	895	
10—15 ..	242	251	232	1,067	1,656	1,680	
15—20 ..	365	338	264	2,468	2,727	2,183	
20 and over ..	303	373	215	2,635	3,265	1,858	
Christian, Indian							
All ages (5 and over) ..	109	129	94	561	598	522	
5—10 ..	45	38	52	155	149	161	
10—15 ..	144	151	135	575	544	614	
15—20 ..	163	170	155	944	925	965	
20 and over ..	110	133	86	603	677	526	
Christian, other—							
All ages (5 and over) ..	962	978	931	9,470	9,630	9,150	
5—10 ..	751	791	712	6,244	6,813	6,170	
10—15 ..	954	993	910	9,470	9,888	8,998	
15—20 ..	958	994	896	9,482	9,800	8,928	
20 and over ..	994	995	994	9,934	9,935	9,929	
Parsi—							
All ages (5 and over) ..	829	893	741	6,132	7,412	4,375	
5—10 ..	551	410	692	1,538	1,706	1,583	
10—15 ..	559	625	490	2,308	3,750	2,985	
15—20 ..	885	916	853	7,550	8,889	6,340	
20 and over ..	903	977	782	7,007	8,305	4,840	
Jew—							
All ages (5 and over) ..	848	1,000	667	8,484	10,000	6,667	
5—10 ..	545	714	250	5,455	7,143	2,500	
10—15 ..	1,000	1,000	1,000	10,000	10,000	10,000	
15—20 ..	1,000	1,000	1,000	10,000	10,000	10,000	
20 and over ..	619	642	672	6,188	6,440	5,714	

Subsidiary Table II.—*Education by age, sex, and locality.*

District and natural division.	Number per mille who are literate.										
	All ages, 5 and over.			5-10.		10-15.		15-20.		20 and over.	
	Total.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	1	2	3	4	5	6	7	8	9	10	11	12
United Provinces (British districts) ..	42	74	7	14	3	62	9	92	12	90	7
<i>Himalaya, West</i> ..	82	113	11	35	8	133	20	166	18	166	13
Dohra Dun ..	116	172	52	56	31	140	77	188	70	191	50
Naini Tal ..	83	126	21	37	11	111	32	140	32	142	18
Almora ..	71	135	7	26	4	131	10	175	10	158	7
Garhwal ..	74	118	4	36	3	111	6	162	5	171	4
<i>Sub-Himalaya, West</i> ..	35	59	8	9	1	40	9	68	12	74	8
Saharanpur ..	13	70	9	9	1	39	7	71	10	92	10
Bareilly ..	39	92	11	12	7	46	15	73	18	76	10
Bijnor ..	37	61	9	10	1	45	11	75	16	77	9
Pilibhit ..	33	56	6	5	2	38	7	67	10	73	6
Kheri ..	24	42	2	6	1	29	3	45	1	53	2
<i>Indo-Gangetic Plain, West</i> ..	41	73	9	11	5	60	11	90	16	88	9
Muzaffarnagar ..	37	61	7	11	3	46	9	65	11	76	7
Meerut ..	49	83	8	11	3	65	11	99	11	102	8
Bulandshahr ..	12	74	5	10	2	59	6	86	8	92	5
Aligarh ..	56	93	10	18	6	74	15	111	15	113	10
Muttra ..	54	90	10	22	6	81	15	111	24	104	7
Agra ..	72	114	18	26	11	101	30	143	27	134	17
Mainpuri ..	37	55	14	15	6	52	21	69	24	64	13
Etah ..	35	58	7	9	4	44	10	81	11	70	6
Budaun ..	26	42	6	6	2	29	9	48	11	52	6
Moradabad ..	37	60	11	12	5	46	14	77	18	73	11
Shahjahanpur ..	37	60	9	13	6	47	13	74	14	72	8
Farrukhabad ..	48	79	10	12	4	69	17	102	21	93	8
Etawah ..	17	77	10	19	7	75	17	104	18	87	9
<i>Indo-Gangetic Plain, Central</i> ..	11	72	6	12	3	58	8	88	11	87	6
Cawnpore ..	64	103	14	15	7	98	19	123	23	118	14
Fatehpur ..	49	89	5	16	2	82	7	115	8	105	5
Allahabad ..	49	81	14	17	7	63	14	102	21	98	14
Lucknow ..	68	114	13	19	5	79	16	144	15	134	13
Unao ..	10	71	5	11	2	60	7	89	9	86	1
Rae Bareli ..	14	83	5	13	1	70	4	106	6	99	3
Sitapur ..	31	53	5	7	3	43	6	64	9	64	4
Hardoi ..	34	57	6	14	3	52	10	77	10	67	5
Fyzabad ..	31	58	1	8	2	46	5	69	8	72	1
Sultanpur ..	14	47	2	4	1	32	2	51	4	60	2
Partabgarh ..	34	68	2	6	4	44	2	77	5	89	2
Bara Banki ..	28	51	3	6	1	40	4	60	6	61	3
<i>Central India Plateau</i> ..	56	103	6	18	1	94	9	137	12	124	6
Jhansi ..	64	155	9	19	5	101	11	146	15	113	9
Jalaun ..	69	124	7	23	5	116	11	165	14	144	7
Hamirpur ..	50	94	5	22	4	92	9	140	10	106	4
Banda ..	45	83	4	11	2	70	6	106	7	106	4
<i>East Satpuras</i> ..	43	83	6	13	1	63	4	100	8	101	8
Mirzapur ..	43	80	6	13	1	63	4	100	8	101	8
<i>Sub-Himalaya, East</i> ..	27	49	3	7	1	39	3	61	5	62	3
Gorakhpur ..	27	50	3	7	1	38	3	71	6	63	4
Basti ..	29	54	2	8	1	46	3	74	4	65	2
Gonda ..	26	48	3	5	1	36	3	53	5	61	3
Bahraich ..	23	42	3	4	1	29	4	40	5	53	2
<i>Indo-Gangetic Plain, East</i> ..	53	97	8	23	3	93	9	106	11	115	8
Benares ..	89	151	14	45	11	144	25	200	31	175	25
Jaunpur ..	45	87	1	18	2	84	6	114	9	104	4
Ghazipur ..	51	91	6	22	2	91	7	131	11	116	6
Ballia ..	54	100	6	31	3	99	7	128	11	117	5
Azamgarh ..	37	69	3	14	1	67	4	93	7	84	4
24 Cities ..	157	236	55	66	30	187	72	292	84	267	54
Rampur State ..	22	37	5	5	2	19	6	36	7	47	5
Tehri-Garhwal State ..	35	71	2	9	1	39	2	73	3	93	2
Benares State ..	32	59	4	13	2	56	3	83	6	68	5

Subsidiary Table III.—*Education by religion, sex, and locality.*

District and natural division.	Number per mill 5 years old and over who are literate.				Remarks.
	Hindus.		Muhammadans.		
	Males.	Females.	Males.	Females.	
1	2	3	4	5	6
United Provinces (British districts) ..	70	5	74	8	
Himalaya, West	140	7	100	17	
Dohra-Dun	151	22	149	32	
Naini Tal	135	15	61	7	
Almora	132	5	291	64	
Garhwal	147	3	105	23	
Sub-Himalaya, West	53	5	59	7	
Saharanpur	62	6	64	6	
Barilly	55	7	61	10	
Bijnor	58	8	55	8	
Pilibhit	51	5	71	7	
Kheri	42	2	42	3	
Indo-Gangetic Plain, West	67	7	65	9	
Muzaffarnagar	55	5	46	7	
Meerut	74	5	54	5	
Bulandshahr	71	5	57	3	
Aligarh	86	8	99	13	
Muttra	86	7	64	7	
Agra	99	12	113	17	
Mainpuri	47	12	69	18	
Etah	53	6	54	6	
Budaun	46	5	59	7	
Moradabad	57	9	59	8	
Shahjahanpur	55	6	73	15	
Farrukhabad	74	8	85	10	
Etawah	72	8	91	22	
Indo-Gangetic Plain, Central	66	5	96	9	
Cawnpore	95	10	129	19	
Patohpur	86	4	93	8	
Allahabad	68	10	130	11	
Lucknow	88	5	158	15	
Unao	70	4	81	8	
Rae Bareilly	77	2	139	10	
Sitapur	53	4	50	4	
Hardoi	55	4	69	9	
Fyzabad	52	3	80	9	
Sultanpur	46	2	59	2	
Partabgarh	65	2	85	1	
Bara Banki	46	2	70	8	
Central India Plateau	95	4	141	13	
Jhansi	95	5	170	13	
Jalaun	122	6	127	13	
Hamirpur	89	3	143	11	
Banda	80	3	122	14	
East Satpuras	77	5	101	3	
Mirzapur	77	5	101	3	
Sub-Himalaya, East	50	2	42	4	
Gorakhpur	50	3	44	5	
Basti	57	2	38	2	
Gonda	49	2	43	6	
Bahraich	11	2	45	5	
Indo-Gangetic Plain, East	93	7	128	15	
Benares	156	22	135	25	
Jaunpur	84	3	116	11	
Ghazipur	90	5	162	13	
Ballia	96	5	165	17	
Azamgarh	64	2	107	12	
24 Cities	244	52	172	27	
Rampur State	25	4	49	5	
Tehri-Garhwal State	71	2	38	..	
Benares State	57	3	72	15	

Subsidiary Table IV.—*English education by age, sex, and locality.*

Literate in English per 10,000.

District and natural division.	1921.										1921		1911.		1901.		1891.	
	5-10		10-15		15-20		20 and over		All ages (5 & over)		All ages		All ages		All ages		All ages	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
United Provinces (British districts.)	9	5	47	11	125	16	90	10	75	10	66	9	49	7	36	5	17	3
<i>Himalaya, West</i>	53	39	131	69	218	61	161	16	100	19	131	43	117	32	61	21	28	13
Dehra Dun	325	219	593	107	193	331	101	257	116	278	385	245	309	159	95	99	109	89
Naini Tal	70	18	114	1-5	201	93	169	50	168	67	151	60	107	12	68	26	2	..
Almora	2	2	36	6	156	19	86	12	73	10	63	9	101	12	50	9	21	9
Garhwal	1	1	50	3	131	9	81	7	70	5	61	5	16	1	27	..	..	..
<i>Sub-Himalaya, West</i>	8	1	38	10	96	13	88	10	69	9	62	8	19	..	..	..	..	..
Saharanpur	7	6	30	8	88	11	129	19	92	15	82	13	71	12	39	10	19	3
Bareilly	19	8	71	23	182	28	129	19	110	18	98	16	81	8	87	5	57	3
Bijnor	2	1	37	9	78	13	61	3	52	4	41	1	27	2	18	..	7	1
Pilibhit	1	..	13	1	68	4	57	1	43	1	38	1	15	1	11	..	6	1
Kheri	5	..	18	1	32	3	32	2	26	1	23	1	15	1	13	1	3	1
<i>Indo-Gangetic Plain, West</i>	8	5	52	11	144	13	763	9	79	9	70	8	50	6	37	1	22	3
Muzaffarnagar	7	4	24	4	61	5	50	4	41	3	36	3	26	1	18	..	6	..
Meerut	12	6	68	19	216	12	176	20	141	17	124	15	82	12	69	9	57	8
Bulandshahr	3	1	51	1	133	2	68	2	64	2	56	2	33	3	20	1	6	1
Aligarh	9	3	73	12	190	17	107	8	93	9	86	8	51	5	47	2	24	..
Muttra	5	4	21	20	76	33	66	12	53	13	17	12	72	6	15	3	30	2
Agra	31	36	140	64	389	67	256	40	219	45	196	39	152	23	81	18	59	17
Mainpur	2	1	17	1	45	7	38	2	24	1	22	1	25	14	19	1	10	1
Etah	3	1	13	1	76	1	43	2	36	2	32	2	17	1	13	1	8	1
Budwan	3	1	27	3	65	6	39	2	35	3	31	2	19	1	15	..	3	..
Moradabad	8	1	56	6	156	9	89	6	79	6	70	5	42	7	45	4	11	1
Shahjahanpur	7	2	14	4	82	11	58	5	51	5	45	1	28	3	20	3	13	1
Farrukhabad	3	4	33	1	140	13	78	6	67	5	60	5	43	3	41	3	15	3
Etawah	2	1	65	3	61	3	59	3	51	1	45	2	36	2	18	1	8	1
<i>Indo-Gangetic Plain, Central</i>	10	5	51	13	135	24	111	13	90	13	80	11	60	10	45	7	22	1
Cawnpore	10	8	71	28	201	43	193	30	153	27	138	21	98	31	65	15	28	4
Fatehpur	3	1	24	2	62	8	43	3	36	3	32	3	16	1	11	1	7	1
Allahabad	32	15	137	40	306	67	245	43	201	40	189	35	124	29	116	26	51	13
Lucknow	12	21	97	62	564	125	169	63	391	12	318	51	368	6	211	40	121	29
Unao	2	1	20	3	64	3	39	2	33	2	30	2	23	1	12	..	6	1
Rae Bareilly	3	1	25	4	52	2	42	2	35	1	31	1	22	1	13	..	6	..
Sitapur	3	4	41	8	82	8	16	3	13	1	38	4	27	1	17	1	13	1
Hardoi	8	..	22	2	74	1	36	2	33	2	29	2	18	1	11	..	3	..
Fyzabad	5	1	28	5	89	10	74	5	58	5	51	1	49	4	37	3	21	3
Sultanpur	2	3	11	4	38	10	27	1	22	2	19	2	12	1	9	..	3	..
Partabgarh	2	2	10	..	48	2	41	1	31	1	27	1	15	..	12	..	5	..
Bara Banki	3	2	16	2	43	1	36	2	30	2	25	1	16	1	14	1	6	..
<i>Central India Plateau</i>	8	5	36	6	101	12	88	11	68	9	60	8	51	8	40	3	23	3
Jhansi	21	15	67	20	190	36	195	31	146	27	128	24	110	20	103	9	62	10
Jaloun	2	1	24	5	78	3	53	3	41	2	39	2	21	1	11	1	7	1
Hamirpur	2	1	17	..	53	1	29	3	26	2	23	2	18	1	12	1	5	..
Banda	3	5	22	1	66	4	47	2	36	2	32	2	27	2	15	1	6	..
<i>East Satpuras</i>	7	3	23	1	49	8	55	12	41	9	36	8	21	3	36	3	8	2
Mirzapur	7	3	23	1	49	8	55	12	41	9	36	8	24	3	36	3	8	2
<i>Sub-Himalaya, East</i>	3	1	19	1	55	3	35	2	29	2	25	2	20	1	15	1	1	..
Gorakhpur	3	1	25	2	81	4	17	3	39	2	34	2	25	2	19	2	5	1
Basti	2	2	15	2	40	1	20	4	18	4	16	..	11	..	7	..	2	..
Gonda	4	1	15	1	40	5	33	3	27	2	24	2	21	2	19	1	5	..
Bahraich	2	1	11	2	24	2	29	2	22	1	20	1	20	1	12	1	6	..
<i>Indo-Gangetic Plain, East</i>	9	2	61	5	141	13	97	6	82	6	72	5	46	3	26	1	10	1
Bonares	12	9	02	18	526	53	318	29	275	28	242	24	161	12	94	6	38	4
Jaunpur	1	..	34	5	78	3	52	1	43	1	37	1	23	1	13	..	5	1
Ghazipur	3	1	40	1	119	5	67	3	56	2	49	2	31	1	11	1	10	1
Ballia	3	3	31	1	124	4	55	1	49	1	43	1	21	..	15	..	4	..
Azamgarh	2	2	20	1	66	2	34	1	29	1	25	1	16	..	10	1	2	..
Rampur State	4	..	21	..	44	2	38	3	31	2	28	2	17	..	12	1	1	..
Tehri-Garhwal State	2	..	15	..	41	2	27	1	23	1	21	1	19	..	14	..	1	..
Bonares State	2	..	23	1	87	4	37	1	34	1	30	1	..	..	..	..	..	..

Subsidiary Table V.—*Progress of*

District and natural division.	Number of literate									
	All ages.									
	Males.					Females.				
	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
1	2	3	4	5	6	7	8	9	10	11
United Provinces (British districts.)	65	61	58	52	45	6	5	2	2	1
<i>Himalaya, West</i>	127	124	105	70	61	12	9	5	3	2
Dehra Dun	160	142	107	100	76	46	31	20	15	10
Naini Tal	116	90	71	32	22	19	11	15	1	3
Almora	117	125	109	59	66	6	6	3	2	2
Garhwal	124	143	128	95	72	4	3	1	1	1
<i>Sub-Himalaya, West</i>	52	47	41	39	37	7	5	3	1	1
Saharanpur	62	55	44	50	47	8	6	2	2	1
Bareilly	55	49	47	39	35	10	5	5	2	1
Bijnor	54	47	39	38	36	8	6	1	1	1
Pilibhit	50	46	41	35	31	5	5	2	1	4
Kheri	39	35	33	32	31	2	3	1	1	4
<i>Indo-Gangetic Plain, West</i>	65	58	45	49	41	8	6	3	2	1
Muzaffarnagar	53	62	47	51	62	6	4	1	1	5
Morut	73	13	56	61	55	6	6	2	2	2
Bulandshahr	65	52	45	51	41	4	4	2	1	5
Aligarh	83	75	52	41	47	9	7	2	1	1
Muttra	80	92	78	76	63	8	8	3	2	1
Agra	102	94	70	68	60	14	11	5	4	3
Mainpuri	49	51	42	38	37	12	6	2	1	1
Ktah	52	43	39	44	38	6	4	2	1	1
Budaun	37	33	28	29	26	5	4	2	1	5
Moradabad	53	44	37	36	33	9	6	3	2	1
Shahjahanpur	54	47	44	40	37	8	5	3	1	1
Farrukhabad	70	65	54	54	41	8	7	3	2	1
Ktawah	69	63	53	49	40	9	7	3	1	1
<i>Indo-Gangetic Plain, Central</i>	61	59	60	55	49	6	5	2	2	1
Cawnporo	93	84	72	71	67	12	8	4	3	1
Fatehpur	79	55	72	59	56	4	3	1	1	5
Allahabad	72	70	80	61	54	12	7	6	3	3
Lucknow	101	95	82	79	72	11	15	8	6	4
Unao	64	60	58	59	51	4	3	1	1	4
Rae Bareilly	74	61	62	61	54	3	3	2	2	1
Sitapur	47	44	46	46	40	4	3	2	1	1
Hardoi	51	46	33	36	35	5	4	1	1	5
Fyzabad	51	53	63	49	39	3	3	2	1	1
Sultanpur	41	50	41	46	37	2	2	1	5	1
Partabgarh	60	46	41	46	34	2	2	1	4	5
Bara Banki	45	43	18	49	43	3	3	1	1	1
<i>Central India Plateau</i>	91	74	71	64	53	6	4	2	1	5
Jhansi	101	84	76	72	51	7	7	3	2	1
Jalaun	109	85	84	70	64	7	4	1	1	4
Hamirpur	83	71	65	55	50	5	3	1	5	3
Banda	71	61	61	58	48	4	3	1	1	4
<i>East Satpuras</i>	69	60	70	58	51	5	3	3	2	2
Mirzapur	69	69	70	58	54	5	3	3	2	2
<i>Sub-Himalaya, East</i>	44	51	56	44	37	2	2	1	1	1
Gorakhpur	44	56	55	44	36	3	3	2	1	1
Basti	47	52	54	40	37	2	2	1	1	1
Gonda	42	53	60	48	39	4	2	1	1	5
Bahraich	37	51	59	47	35	2	2	1	1	3
<i>Indo-Gangetic Plain, East</i>	85	69	71	58	47	7	5	2	2	1
Benares	133	120	112	100	81	21	16	8	5	4
Jaunpur	76	64	54	48	41	3	3	1	1	1
Ghazipur	84	57	62	56	48	5	3	2	2	1
Ballia	88	58	66	65	41	5	2	1	2	1
Azamgarh	60	55	68	42	34	3	3	2	1	4
Rampur State	33	21	25	24	20	4	4	1	1	3
Tohri-Garhwal State	63	74	44	45	53	1	1	1	4	3
Benares State	51	..	..	..	..	4	..	..	..	..

education since 1881.

per millo.			15—20.			20 and over.					
Males.			Females.			Males.			Females.		
1921.	1911.	1901.	1921.	1911.	1901.	1921.	1911.	1901.	1921.	1911.	1901.
12	13	14	15	16	17	18	19	20	21	22	23
92	83	77	12	9	4	90	82	82	7	9	3
166	167	138	18	15	6	166	163	110	13	10	6
188	175	125	70	45	23	101	176	136	50	32	25
140	110	75	32	25	9	142	113	93	18	12	6
175	177	159	10	10	5	158	164	116	7	6	3
162	192	170	5	4	2	171	197	177	4	3	2
68	61	47	12	9	5	74	65	61	8	6	1
74	66	44	10	5	3	92	79	67	10	8	3
76	67	73	18	11	10	76	69	65	10	7	6
75	64	37	16	10	2	77	63	57	9	6	2
67	60	47	10	11	4	73	62	60	6	6	2
45	45	32	4	5	3	53	49	48	2	3	2
90	81	86	16	11	5	88	79	65	9	7	3
65	64	52	11	12	1	76	74	71	7	5	1
99	73	94	11	8	5	102	89	72	8	6	3
86	79	67	8	9	4	92	70	64	5	3	3
111	108	93	15	11	6	113	95	67	10	7	2
111	110	126	24	12	7	104	121	102	7	9	4
146	125	216	27	20	11	134	118	81	17	12	5
69	76	56	24	11	3	64	68	57	13	6	2
81	62	55	11	7	4	70	59	55	6	4	1
48	50	40	11	6	5	52	43	38	6	4	2
77	65	66	18	12	5	73	60	48	11	6	3
73	64	56	14	10	5	72	61	61	8	6	3
102	84	103	21	14	7	93	70	69	8	7	3
104	91	73	18	11	4	87	79	71	9	7	3
88	79	72	11	8	5	87	79	86	6	5	3
123	117	91	23	13	5	118	108	96	14	8	4
115	80	87	8	7	1	105	68	100	5	4	1
102	98	89	21	15	8	98	91	114	14	8	6
144	130	104	25	29	14	135	124	117	13	17	10
89	81	80	9	5	2	86	80	80	4	3	1
106	79	80	6	4	3	99	87	87	3	3	2
64	59	57	9	5	4	64	61	67	4	3	2
77	68	42	10	7	3	67	61	50	5	3	2
69	69	69	8	4	2	72	74	94	4	3	2
51	55	42	4	3	2	60	72	64	2	2	1
77	61	64	5	3	2	89	68	98	2	2	1
60	57	64	6	4	3	61	54	67	3	3	2
137	109	78	12	9	3	124	95	101	6	1	2
146	111	78	15	12	5	113	109	113	9	8	3
165	131	99	14	7	3	114	106	115	7	4	2
140	105	77	10	7	1	106	90	94	4	3	1
105	96	66	7	8	2	106	78	88	1	3	1
100	89	81	8	6	4	101	85	105	8	3	3
100	89	81	8	6	4	101	85	105	8	3	3
61	72	61	5	4	3	62	76	86	3	3	2
71	81	63	6	5	3	63	79	81	4	2	2
74	72	66	4	4	4	66	72	83	2	3	1
53	64	66	5	3	1	61	77	92	3	2	1
46	62	51	5	4	2	53	70	96	2	2	2
106	100	86	5	9	4	53	93	102	2	6	3
200	179	136	34	28	11	175	157	157	25	19	10
114	88	73	9	5	2	101	85	79	4	4	2
131	89	76	11	5	4	116	78	87	6	3	2
126	80	49	11	6	1	117	81	99	5	3	1
93	81	95	7	5	3	84	73	96	4	3	1
36	24	23	7	2	2	47	32	38	5	2	2
73	95	49	3	2	1	93	104	67	2	1	1
88	..	..	6	..	..	68	..	..	5	..	..

Subsidiary Table VI.—*Literacy by caste.*

Caste (with characteristic occupation).		Number literate per 1,000.		Increase (+) or decrease (-) since 1911.		Number literate in English per 10,000.		Increase (+) of decrease (-) since 1911.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1		2	3	4	5	6	7	8	9
Agricultural ..	Jat ..	51 (58)	2 (3)	+9	±0	38 (43)	1 (1)	+21	±0
	Kachhi ..	10 (11)	1 (5)	+2	±0	3 (3)	0 (0)	+2	±0
	Kurmi ..	30 (34)	1 (1)	+6	±0	10 (11)	0 (0)	+5	±0
	Lodha ..	13 (15)	1 (1)	+3	+1	2 (3)	1 (1)	±0	+1
	Tharu ..	54	2	..	..	2	0	..	..
Artizan and Industrial.	Barhai ..	27 (31)	2 (2)	+1	±0	15 (17)	7 (9)	+7	+7
	Dhunia ..	14	1	..	..	3	0	..	..
	Depressed Classes (Hills).	12	4	..	..	1	0	..	..
	Julaha ..	30 (31)	3 (3)	+8	+1	9 (11)	0 (0)	+6	±0
	Kumhar ..	6 (7)	3 (3)	+1	±0	1 (5)	0 (0)	+3	±0
	Lohar ..	20 (23)	1 (1)	±0	-1	6 (7)	0 (0)	+2	±0
	Toli ..	22 (25)	1 (1)	+1	+1	5 (5)	0 (0)	+2	±0
	Agarwal ..	308 (148)	49 (56)	+7	+19	409 (459)	25 (29)	+90	+18
Commercial ..	Agrahari ..	123	3	-58	-5	35	1	+23	+1
	Kalwar ..	127 (144)	5 (6)	-6	±0	81 (95)	2 (2)	+55	+2
	Sonar ..	140 (158)	8 (9)	-1	+2	16 (52)	2 (2)	+13	+1
Gipsy ..	Ilabura ..	8	0	..	..	0	0	..	..
	Nat ..	2	1	..	..	1	1	..	..
Labouring ..	Chamar ..	2 (3)	2 (2)	±0	±0	1 (1)	0 (0)	±0	±0
	Kori ..	8	3	-10	±0	1	0	±0	±0
	Luniya ..	11 (12)	1 (1)	-1	±0	3 (4)	0 (0)	+1	±0
	Pasi ..	3 (3)	1 (1)	±0	±0	1 (1)	0 (0)	+1	±0
Landowning ..	Bhumhar ..	166 (185)	10 (11)	+21	+3	67 (75)	0 (0)	+35	±0
	Rajput ..	114 (129)	12 (13)	+6	+5	57 (61)	5 (6)	+26	+4
	Taga ..	69	4	-5	-1	38	0	14	-1
The Professions	Brahman ..	191 (214)	13 (15)	-18	+3	122 (137)	8 (9)	+43	+6
	Kayasth ..	523 (585)	90 (102)	-25	+11	1,122 (1,256)	50 (57)	+343	+29
	Mughal ..	145	27	..	..	190	16	..	..
	Saiyid ..	210 (236)	38 (48)	-67	+2	227 (255)	13 (15)	-134	+1
Menial ..	Bhangi ..	5 (6)	3 (4)	+2	±0	3 (3)	0 (0)	+2	±0
	Dom (plains) ..	5	0	..	..	0	0	..	..
Pastoral ..	Ahir ..	12 (13)	5 (5)	+3	±0	1 (5)	0 (0)	+1	±0
	Gadoriya ..	6 (7)	4 (4)	+1	±0	14 (16)	0 (0)	+11	±0
	Gujar ..	19 (22)	1 (1)	+6	±0	4 (5)	0 (0)	+2	±0
Various ..	Kahar ..	10 (11)	1 (1)	±0	±0	6 (7)	0 (0)	+3	±0
	Mallah ..	10	1	±0	±0	2	0	+1	±0
	Naumuslim ..	40	4	..	..	11	6	..	..
	Qassab ..	19	4	..	..	6	1	..	..

(1) The castes for which figures are given are taken as typical of all classes of society from those selected for Imperial Table IX.

(2) The figures in columns 2 and 3, 6 and 7 show ratios calculated on all ages of the sex to facilitate comparison with the 1911 figures so calculated; the figures in brackets following them give literate ratios for those castes whose age periods are known, calculated on persons 5 years of age and over.

Subsidiary Table VII.—*Number of institutions and pupils according to the returns of the Educational department.*

Class of institution.	1921.		1911	
	Number of—		Number of—	
	Institu- tions.	Scholar.	Institu- tions.	Scholars.
Arts Colleges	26	5,167	35	4,221
Professional Colleges	16	1,611	9	1,136
Secondary Schools—				
English	320	60,619	232	47,321
Vernacular	632	50,067	380	15,261
Primary Schools	16,368	818,356	16,008	169,802
Technical and Industrial Education—				
Training schools for masters	569	1,195	111	1,085
Training schools for mistresses	27	175	17	313
Other Special Schools	266	11,221	89	1,195
Private institutions, advanced schools teaching—				
Arabic	296	8,788	181	9,510
Sanskrit	324	6,612	104	7,134
Elementary schools teaching—				
Vernacular	1,116	24,401	2,090	31,669
Koran	1,078	17,652	1,351	17,192
Other schools not conforming to departmental standards	266	8,564	312	6,875

Subsidiary Table VIII.—*Education in cities by sex.*

						<i>All religions.</i>			
						Male.		Female.	
Total 24 cities						213		48	
Agra						190		53	
Allahabad						287		93	
Amroha						155		31	
Bareilly						208		60	
Benares						289		78	
Budaun						195		45	
Cawnpore						201		32	
Etawah						241		48	
Farrukhabad						241		39	
Fyzabad						252		51	
Gorakhpur						270		57	
Hathras						216		30	
Jaunpur						246		39	
Jhansi						212		46	
Koil (Aligarh)						218		49	
Lucknow						200		31	
Meerut						216		36	
Mirzapur						123		39	
Moradabad						175		49	
Muttra						77		33	
Rampur						141		18	
Saharanpur						234		51	
Sambhal						131		27	
Shahjahanpur						162		44	
						<i>Hindu.</i>		<i>Mohammedan.</i>	
						Male.	Female.	Male.	Female.
Cities						221	17	151	24

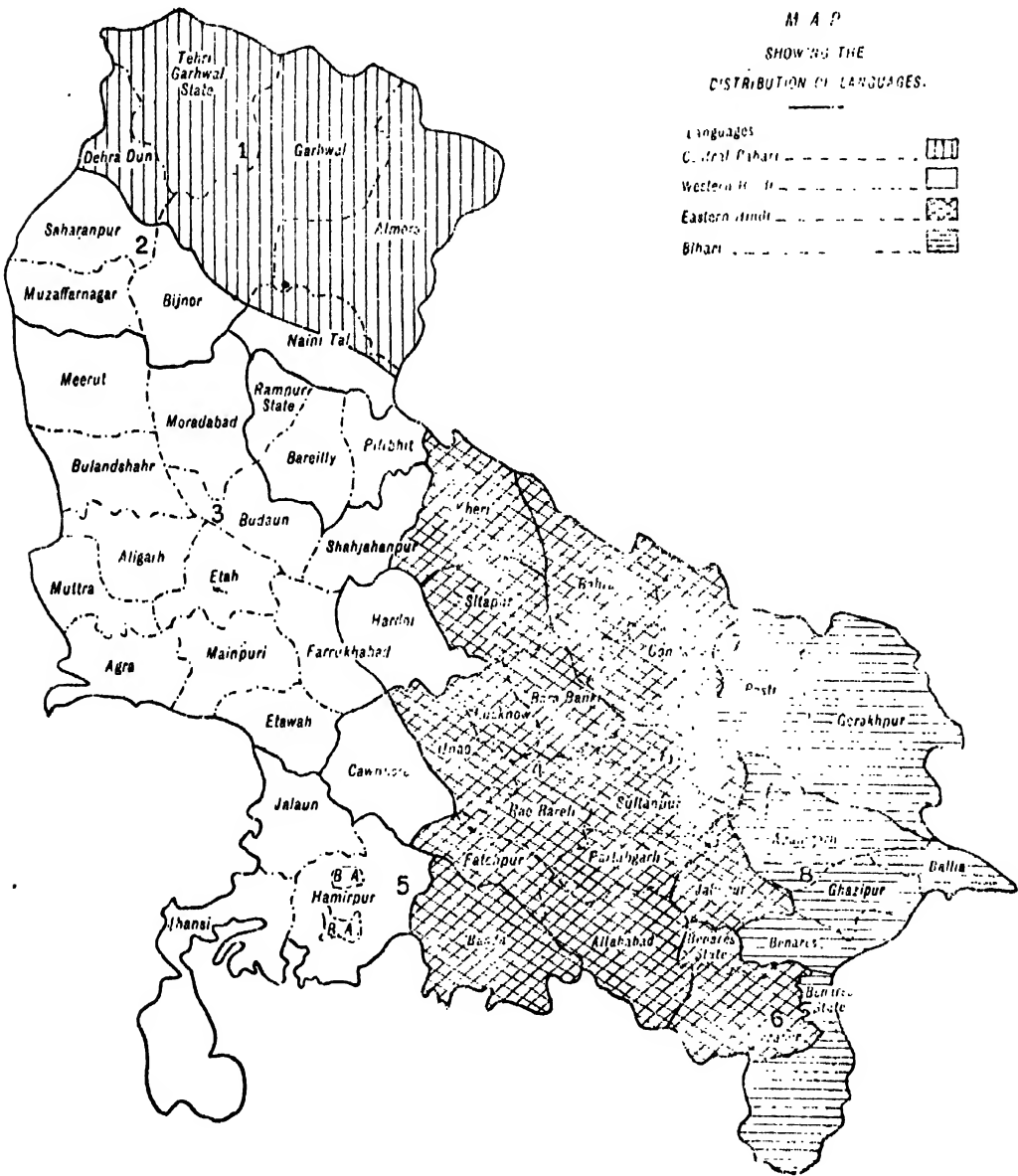
Chapter IX.--LANGUAGE.

The figures relating to language are shown in Imperial Table X. Of this table Part A gives the facts obtained directly from the entries as regards language made in the census schedules. Part B distributes the figures according to the classification of the Linguistic Survey.

Statistics of language where found

2. The figures given in part A are, as far as they go, accurate. I say "as far as they go," for no distinction is attempted, as it has been attempted in previous censuses, between the provincial vernaculars. At the same time they reproduce, as I am convinced and as is in effect admitted in the Report of 1911, all the information obtainable by means of the census schedules. According to the Linguistic Survey, the province has four vernaculars—Western Hindi, Eastern Hindi, Bihari and Central Pahari—distributed as shown in the subjoined map. But this classification is wholly unfamiliar to the general public,

The accuracy of the figures.



and can only be used by the indirect method of assigning to each vernacular the population, less those returning a foreign language, of the tract where it is spoken: as is done in Subsidiary Table II printed at the end of this chapter. According to popular ideas, on the other hand, the province has two vernaculars—Urdu and Hindi. The distinction between those (but not between the four vernaculars of the survey) was attempted in filling up the schedules in 1901 and 1911. The attempt was not repeated in 1921, for reasons presently to be explained.

The rules for filling up the language column directed that for people using the ordinary speech of the province "Hindustani" was to be entered: for others was to be entered the name of the language spoken as given by the speaker. For any who used more than one language that language which he used in his own home was to be put down. These instructions, though unambitious, were clear and could not give rise to controversy. I found no case of their being misunderstood. Hence my statement above that the figures are accurate.

*The four
provincial
vernaculars*

3. The four provincial vernaculars of the Linguistic Survey were dealt with very fully by Mr. Blunt in 1911. The position in regard to these is unchanged, and it is unnecessary to discuss them again. Enough to say that for the unscientific like myself these vernaculars are not different languages, but different dialects of the same language. I have served in three of the four vernacular areas: and to me the difference between speaking to a villager of Gorakhpur and to a junglemans of Jhansi is precisely the difference between speaking to a peasant of Devon and to a crofter of Aberdeen. If you are intelligible to the one you can with patience make yourself intelligible to the other.

Territorially the vernaculars shade off into one another by imperceptible degrees: and in defining the areas within which each is spoken administrative boundaries have been taken in the absence of any clearly marked line of division.

The value of Subsidiary Table II can be gauged in the light of what has been said in this paragraph.

*The popular
distinction of
Urdu and
Hindi.*

4. The popular division of the provincial speech into Urdu and Hindi has also been fully dealt with by Mr. Blunt, to whose Report I would refer the reader who seeks an adequate treatment of this subject. The distinction as ordinarily drawn has various meanings, but principally two—

- (1) It is a distinction of script, the vernacular being called Urdu when written in the Persian, and Hindi when written in the Deva Nagari character, or
- (2) It is a distinction of mannerism, the same vernacular being called Urdu when a Persianised vocabulary is affected and Hindi when Sanscritized words are used. With meaning (1) we are not concerned, for it has to do with the written not with the spoken word: but I would mention, as a District Census Officer of 1911, that it undoubtedly confused the minds of enumerators who had to distinguish Urdu and Hindi in filling up the schedules of that year. The distinction in sense (2) is also more concerned with literature than with speech. The mannerisms described are far more pronounced in writing than in conversation and in the latter are ordinarily only aimed at on formal occasions: while under the influence of excitement they are, in my experience, invariably forgotten.

At the last census the distinction so far as it was defined at all, was made in a third sense—Urdu being taken to mean the vernacular when it was Persianised, and Hindi the vernacular when it was not. In effect, with small exceptions, Urdu was to be the urban and Hindi the rural speech of the province.

This was the only sense in which the distinction, in practice, could be attempted. If it had been attained, it would not, in my opinion, have been of much value. It was admittedly not attained: partly because the various other senses of the distinction confused the enumerators, and partly because the matter was taken up on racial lines and made the subject of a bitter controversy, in which the enumerating staff took part.

These two obstacles to success would have been at least as serious in 1921 as they were in 1911; and success being in my own view not worth attaining in

any case, I made, with the approval of Government, no attempt to distinguish between Urdu and Hindi.

5. In Table X, therefore, the speakers of the vernaculars native to the province, whether these be the Western Hindi, Eastern Hindi, Bihari and Central Pahari of the scientists, or the Urdu and Hindi of the vulgar, have been lumped together as speaking "Hindustani". Whether the word "Hindustani" can properly bear this sense I am not prepared to assert. The question is not important. But from the readiness with which its use in this sense was accepted all over the province, I fancy that it can. In any case it serves as a label.

*Hindustani
the common
provincial
speech.*

It will be seen from what has been said that Table X gives little more real information than as to the number and nationality of immigrants and visitors to the province who have not yet become merged in the resident population. This information is summarised in Subsidiary Table I at the end of the chapter. Changes since 1911 revealed by this table and by Subsidiary Table II are changes not of language but of population, and are dealt with in chapters I and III.

6. Following precedent I will conclude this chapter by considering whether any change or development has taken place during the decade in the provincial speech itself: though of course no light is thrown on this subject by the census figures. A language is developed mainly in two ways: (1) by popular contact with new ideas and (2) by the experiments of litterateurs. To take (2) first, the popular speech is still wholly unaffected in this way. So far as there is any Hindustani literature (in which I include what would be called Hindi and Urdu literature) at all, it is written in an artificial language only intelligible to those who have deliberately learnt it. The excellence of a writer's style is measured by the reconditeness of his vocabulary. Neither such vernacular books as are published, nor the vernacular newspapers, are understood of the people. They therefore do not influence the language that the people use.

*Development
of Hindustani*

Hindustani certainly continues to be developed by popular contact with new ideas, and the war has helped this process. The development in the main takes the form of the adoption of English words. A long list could be given of such words which have obtained or have been obtaining currency in the last decade. That this currency is not confined merely to the educated classes is illustrated by the following incident. Some years ago I was attempting to settle a land dispute in an out-of-the-way village in the Farrukhabad district. Ganesh was anxious for settlement. Parshadi was not, and raised objections to every suggestion made. Ganesh at last lost patience and declared that they must go to the courts. "I can come to no friendly agreement with Parshadi" he said, "*bara barristari karnewala hai*". "Barristery" is a word which deserves a long life, though it is perhaps hardly complimentary to a distinguished profession.

But development of this kind is bound to come to a language unaided. What Hindustani needs is standardisation. This standardisation is provided for English by journalism. A linguistic survey might classify the dialects of Great Britain as (1) West Country English, (2) Midland English, (3) North Country English, (4) Scots and (5) Glasgow. (This list pretends to no completeness.) Each of these dialects differs greatly from the others in idiom and vocabulary, but all are held together, and given an impetus towards union rather than towards fission, by the newspapers. Even a Glasgow man is alleged to understand the *Daily Mail*. But whereas the English of the south-east Midlands became "standard English" within a century of its first use in Caxton's printed books, journalism as practised in this province has no influence towards standardisation. It continues to use a "literary" language of its own, not understood of the people. Were it to adopt a simple popular style, this course would not only make for progress but also, one would have thought, be a sound financial proposition.

Other forces tending towards standardisation are (1) the school curriculum, (2) the vernacular publications of Government. Both aim at a fairly simple diction and are undoubtedly exerting their influence; though as regards the curriculum it is suggested in all humility that a retrograde step was taken some years ago, when passages in "High Hindi" and "High Urdu" were introduced into the school readers, avowedly to enable students to read modern newspapers. Journalism should go to the people, not the people to journalism. That the

language used in official transactions is tending towards simplification will be realised by any district official if he compares the jargon of the Land Records, or that still spoken by police station officials, which is a survival of the old official style, with the vernacular publications in the Gazette of the present day.

Without the help of journalism, however, standardisation can advance little, and it is perhaps over-sanguine to see any appreciable advance since 1911.

Subsidiary Table I.—*Distribution of total population by language.*

Family and sub-family.	Branch and sub-branch.	Group.	Language.	Population		
				Persons	Males	Females
1	2	3	4	5	6	7
United Provinces	..	..	..	46,510,668	24,368,975	22,141,693
Tibeto-Chinese family.	Tibeto-Himalayan sub-branch. Assam and Burmese branch.	Tibetan group	Bhotia ..	7,689	3,423	1,266
		Kuki Chin group ..	Manipuri ..	1	1	..
		Burmese group ..	Burmese ..	22	17	5
Mongolian family.	..	..	Turkish ..	2	1	1
	..	..	Chinese ..	34	27	7
	..	..	Others ..	2	2	..
European sub-family.	..	..	English ..	32,242	21,052	11,190
	..	..	Others ..	123	96	27
Malayo-Polynesian family	..	..	Malay ..	16	16	..
Dravidian family.	..	Dravid group ..	Tamil ..	820	436	384
			Kanarese ..	482	282	200
	..	Intermediate Andhra group. ..	Gondi ..	1	..	1
			Telugu ..	500	288	212
	Eranian Branch	Western group ..	Persian ..	301	232	69
		Eastern group ..	Balochi ..	1	..	1
			Pashto ..	991	861	130
	Non-Sanskritic sub-branch.	Shina-Khowar group. ..	Shina ..	4	4	..
			Kashmiri ..	82	62	20
		North-west group ..	Sindhi ..	95	55	40
		Southern group ..	Marathi ..	2,812	1,760	1,052
		Sanskritic sub-branch.	Eastern group ..	Oriya ..	92	67	25
Bihari ..				741	373	368
Bengali ..	23,454		11,140	12,314		
Mediate and Western group. ..	Hindustani ..		46,389,073	21,293,750	22,095,323	
Indo-European family.	..	..	Rajasthani ..	4,595	2,837	1,758
			Gujarati ..	2,790	1,594	1,196
			Panjabi ..	25,058	17,514	7,524
			Naipali ..	18,465	12,043	5,522
Semitic family ..	..	..	Arabic ..	60	42	18
Unclassified languages,	..	..	Others ..	140	100	40

Subsidiary Table II.—*Distribution by language of the population of each district.*

District and natural division.	Number per 10,000 of population speaking—										Remarks.
	Hindustani.	Panjabi.	Bengali.	Rajasthani.	Marathi.	Gujarati.	Naijali.	Bhotia (Tibetan).	English.	Other languages.	
1	2	3	4	5	6	7	8	9	10	11	12
United Provinces ..	9,974	5.5	5.0	1.0	0.6	0.6	4.0	1.7	7.0	0.6	(1) Includes 4 Persian and 3 Pashto speakers per 10,000.
<i>Himalaya, West ..</i>	<i>9,830</i>	<i>13</i>	<i>2</i>	<i>1</i>	<i>*</i>	<i>*</i>	<i>77</i>	<i>42</i>	<i>31</i>	<i>4</i>	
1. Dehra Dun ..	9,293	103	19	*	4	1	351	28	187	14 ⁽¹⁾	
2. Naini Tal ..	9,850	*	*	8	*	1	82	3	53	1	
3. Almora ..	9,882	*	*	..	..	*	43	70	4	1
4. Garhwal ..	9,891	*	*	..	..	*	43	63	2	1
5. Tehri State ..	9,989	1	*	..	..	..	1	9	*	*
<i>Sub-Himalaya, West</i>	<i>9,977</i>	<i>12</i>	<i>2</i>	<i>1</i>	<i>*</i>	<i>*</i>	<i>2</i>	<i>*</i>	<i>6</i>	<i>*</i>	
6. Saharanpur ..	9,944	85	3	*	..	*	1	*	14	3	
7. Baroilly ..	9,980	6	1	..	..	*	*	..	12	1
8. Bijnor ..	9,997	1	1	..	..	*	*	..	*	1
9. Pilibhit ..	9,988	4	*	..	*	*	6	..	1	1	
10. Kheri ..	9,977	13	*	5	..	..	4	..	1	*
11. Rampur State ..	9,995	1	4	..	..	..	..	..	*	*
<i>Indo-Gangetic Plain, West.</i>	<i>9,981</i>	<i>10</i>	<i>1</i>	<i>1</i>	<i>*</i>	<i>*</i>	<i>*</i>	<i>..</i>	<i>5</i>	<i>2</i>	
12. Muzaffarnagar ..	9,998	1	*	1	*	*	*	..	*	*	
13. Meerut ..	9,919	51	2	*	2	*	1	..	24	1	
14. Bulandshahr ..	9,998	*	*	..	..	*	..	..	*	2
15. Aligarh ..	9,995	2	1	*	..	*	..	..	1	1
16. Muttra ..	9,981	3	3	..	*	*	..	..	12	1
17. Agra ..	9,968	11	3	2	1	3	*	..	11	1	
18. Mainpuri ..	9,999	*	*	*	*	*	..	..	..	1
19. Etah ..	9,993	*	*	*	*	*	..	..	1	1
20. Badaun ..	9,996	*	*	4	*	*	..	..	*	*
21. Moradabad ..	9,970	25	1	*	*	*	*	..	3	1	
22. Shahjahanpur ..	9,993	5	1	*	*	*	..	..	1	..
23. Farrukhabad ..	9,996	*	*	1	*	*	..	..	2	1
24. Etawah ..	9,996	*	1	..	..	2	..	..	1	*
<i>Indo-Gangetic Plain, Central.</i>	<i>9,980</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>*</i>	<i>*</i>	<i>..</i>	<i>11</i>	<i>1</i>	
25. Cawnpore ..	9,947	6	8	4	4	2	1	..	25	3	
26. Fatehpur ..	9,998	*	*	..	..	*	*	..	1	1
27. Allahabad ..	9,942	5	19	..	..	1	*	..	31	2
28. Lucknow ..	9,902	18	9	1	*	2	1	..	64	3	
29. Unao ..	9,999	*	*	*	..	*	*	..	*	1	
30. Rao Bareilly ..	9,998	1	*	*	..	*	*	..	1	*	
31. Sitapur ..	9,998	*	*	*	..	*	1	..	1	*	
32. Hardoi ..	9,999	*	*	..	..	..	..	..	*	1
33. Fyzabad ..	9,988	..	1	*	..	..	..	..	10	1
34. Sultanpur ..	10,000	*	*	*	..	..	..	..	*	*
35. Partabgarh ..	9,999	*	*	1	..	..	..	..	*	*
36. Bara Banki ..	10,000	*	*	..	..	..	..	..	*	*
<i>Central India Plateau</i>	<i>9,979</i>	<i>3</i>	<i>1</i>	<i>*</i>	<i>2</i>	<i>1</i>	<i>*</i>	<i>..</i>	<i>13</i>	<i>1</i>	
37. Jhansi ..	9,936	9	2	*	4	2	*	..	44	3	
38. Jalaun ..	9,998	*	*	*	1	*	..	..	1	*
39. Hamirpur ..	9,997	1	*	*	1	*	..	..	1	*
40. Banda ..	9,996	*	*	*	1	1	..	..	1	1
<i>East Satpuras</i>	<i>9,979</i>	<i>5</i>	<i>1</i>	<i>1</i>	<i>*</i>	<i>*</i>	<i>*</i>	<i>..</i>	<i>3</i>	<i>8.1</i>	(2) Includes Bihari, 7 per 10,000.
41. Mirzapur ..	9,974	5	4	1	..	..	..	..	5	11 ⁽³⁾
42. Benares State ..	9,990	4	4	1	..	*	1	(3) Includes Bihari, 10 per 10,000.
<i>Sub-Himalaya, East</i>	<i>9,993</i>	<i>*</i>	<i>1</i>	<i>2</i>	<i>*</i>	<i>*</i>	<i>3</i>	<i>..</i>	<i>1</i>	<i>*</i>	(4) Includes Tami 6, and Telugu 4, per 10,000.
43. Gorakhpur ..	9,987	*	2	5	*	*	5	..	1	*	
44. Basti ..	9,999	*	*	*	..	*	*	..	*	1	
45. Gonda ..	9,995	*	3	1	..	*	1	..	*	*	
46. Bahraich ..	9,995	1	*	1	..	*	3	..	*	*	
<i>Indo-Gangetic Plain, East.</i>	<i>9,959</i>	<i>1</i>	<i>29</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>*</i>	<i>1</i>	<i>3</i>	
47. Benares ..	9,707	5	165	5	14	14	10	*	7	13 ⁽⁴⁾	(4) Includes Tami 6, and Telugu 4, per 10,000.
48. Jaunpur ..	9,999	..	*	*	..	..	..	..	*	1
49. Ghazipur ..	9,995	1	3	..	..	..	..	..	1	*
50. Ballia ..	10,000	..	*	*	..	..	..	..	*	*
51. Azamgarh ..	9,999	*	*	*	*	..	*	..	*	1	

A star has been inserted in columns 3 to 11 where the ratio of those speaking each language to the total population is less than 1 in 10,000; and where these stars appear column 11 shows the ratio of the sum of the languages represented in the starred columns added to that of any "other languages".

Chapter X.—INFIRMITIES.

At this as at previous censuses information was collected regarding four infirmities—insanity, deaf-mutism, blindness and leprosy. The statistics of these are shown in Imperial Tables XII and XIIA.

The statistics and their accuracy.

The enumerators were given the same instructions as before, save that they were directed to enter as deaf-mute persons who were deaf and dumb, not merely persons who were deaf and dumb from birth. I do not think that the alteration in the instructions made any appreciable difference to the statistics, except indirectly to the statistics of the blind. However carefully the words "from birth" were placed, enumerators in 1911 found it difficult to remember to which infirmity they referred: and as a District Census Officer in that year I came across several instances where a blind person was not entered as blind because his blindness was due to postnatal disease or accident. I am disposed to believe therefore that for blindness the figures are more complete, and for other infirmities are neither more nor less accurate than they were in 1911. At any time however a high degree of accuracy cannot be looked for in these statistics. In the first place, there will always be concealment of defects and deformities, such concealment being obviously much more likely to succeed in the case of females than in the case of males. In the second place, though enumerators were warned against confounding the weak-minded with the insane, the one-eyed, or the large class of elderly persons who cannot see at night, with the blind, and persons suffering from leucoderma with lepers; yet it must be remembered that they were mostly men on the margin of literacy and possessed of no skill or practice in diagnosis. With the most thorough checking mistakes and omissions must remain, and in examining the maps printed in the course of this chapter I have seriously—though unsuccessfully—considered whether the district figures cannot be correlated with what I know of the energy of the several District Census Officers.

2. The total number of afflicted persons found at this and at the last four

The number of the afflicted.

Infirmity.	1921.	1911.	1901.	1891.	1881.
Insane..	7,175	8,824	6,849	5,581	6,847
Deaf-mute	22,678	26,562	17,758	32,896	27,649
Blind ..	105,072	104,566	82,551	109,913	129,838
Leprosy ..	12,296	14,143	11,382	16,895	17,822
Total	147,221	153,595	118,486	165,235	181,656

censuses is shown in the margin. The number has decreased since 1911 by just over 4 per cent., or by about 1 per cent. more than the decrease in the general population. One would like to attribute this decrease to improved hygiene; but it would be difficult to do so, since blindness, the infirmity

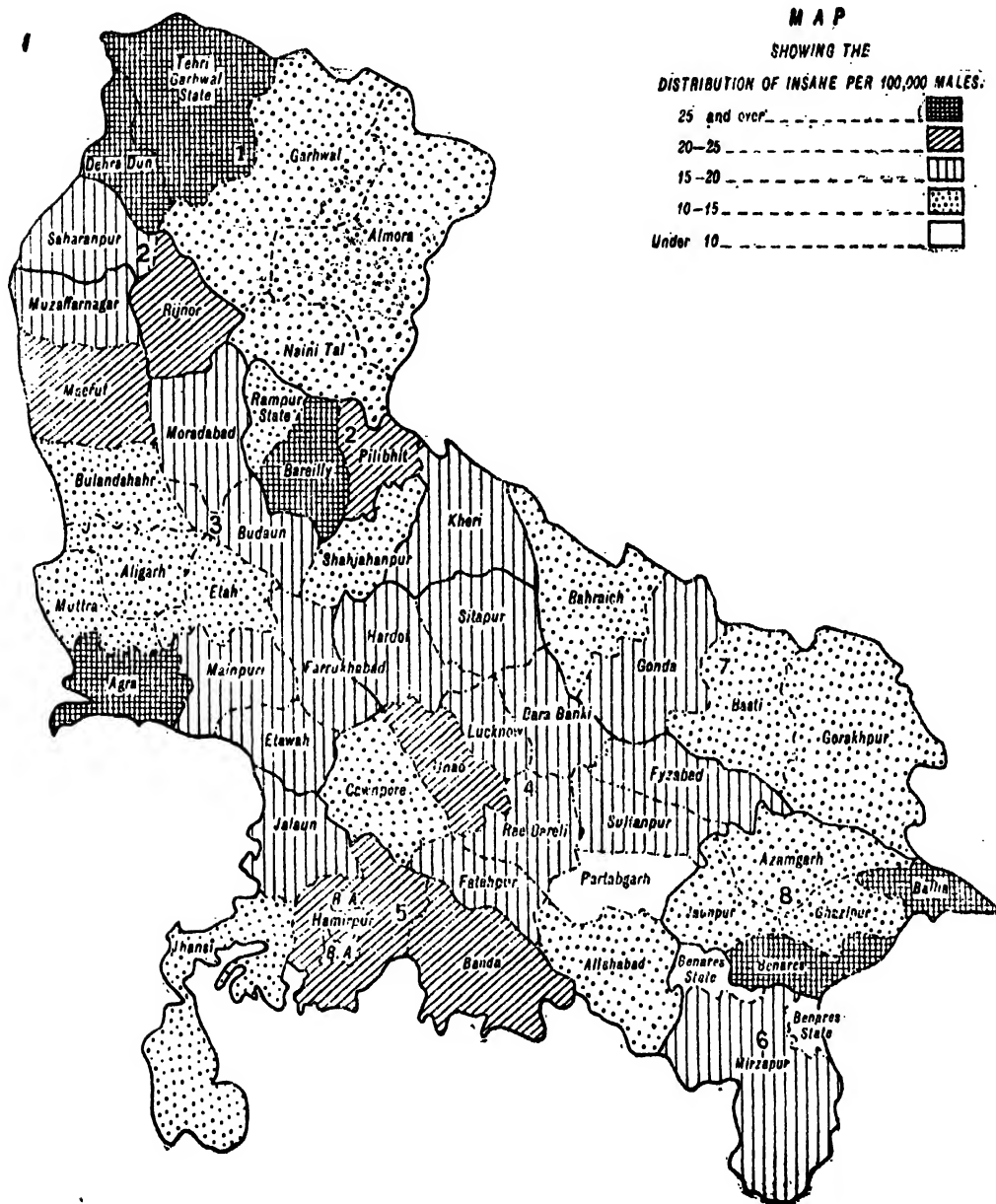
most responsive to medical treatment, is alone in showing a larger figure. It is at any rate satisfactory to find that, if the year 1901 be disregarded (as it should be, for the afflicted must have been the first to suffer in the great famine of 1897), there has been a marked diminution of all infirmities except lunacy since 1891, the first year for which the statistics are accepted as reasonably accurate.

In the succeeding paragraphs the statistics of each infirmity are dealt with separately. The maps on which the discussion of distribution is based illustrate the figures for males only: those for females (except possibly in the case of blindness) are too unreliable to be included.

The distribu-
tion of the
insane.

(i) by locality.

3. The inset map shows the proportional distribution of the insane. The



VIII

absolute numbers are very small—no district where an asylum is not located has more than 340 lunatics (Gorakhpur, with a population of nearly $3\frac{1}{2}$ millions)—and it is very clear that they are too small to suggest any but negative conclusions. The figures for Bareilly, Agra and Benares are upset by the presence of asylums. Of the remaining districts and states, the proportion is highest in Dehra Dun, Ballia and Tehri Garhwal. In 1911 it was highest in Bahraich, Kheri, Hamirpur and Bara Banki. It is now lowest in Partabgarh and Benares State: in 1911 it was lowest in Ghazipur, Garhwal, Etah and Mirzapur. It is evident at least that lunacy has no connection with locality, and an examination of the birth places of the inmates of the asylums points to the same negative conclusion.

There are now fewer lunatics than in 1911, but more than were found at any previous census. No inference can be drawn from these facts: only about 150 persons in every million are insane, and I seem to know a large number of these personally.

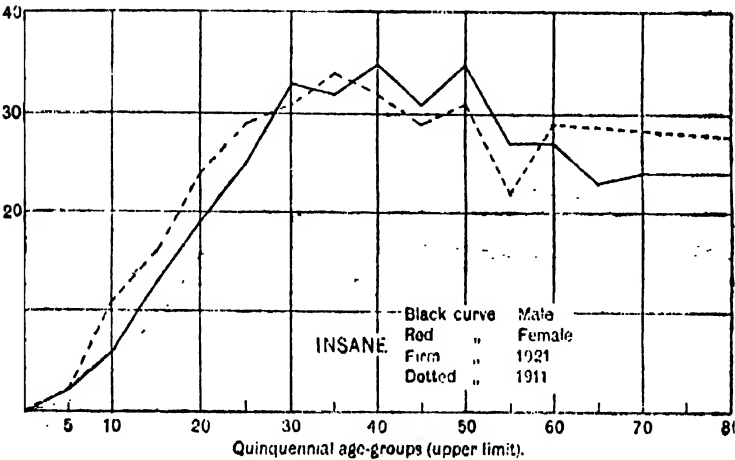
(ii) by sex.

From the statistics it would appear that lunacy is more prevalent among men than among women in the proportion of nearly two to one. It is quite

impossible to say whether it is really more prevalent or not, although it is known to be more prevalent in most countries except England. No family is proud of an insane member, and while it can hardly conceal the existence of one if he be a male, concealment is obviously often possible in respect of a female; and would generally be attempted, especially if the female had not yet been married.

In two districts—Dehra Dun and Naini Tal—the number of insane females exceeds that of insane males. In the case of Dehra Dun the same excess was found in 1911. The reason probably lies in the large number of elderly Europeans settled in the Dun and in the hills.

The distribution of the insane by age is shown in different forms in Subsidiary Tables II and III and is illustrated by a graph in the margin. (iii) by age.

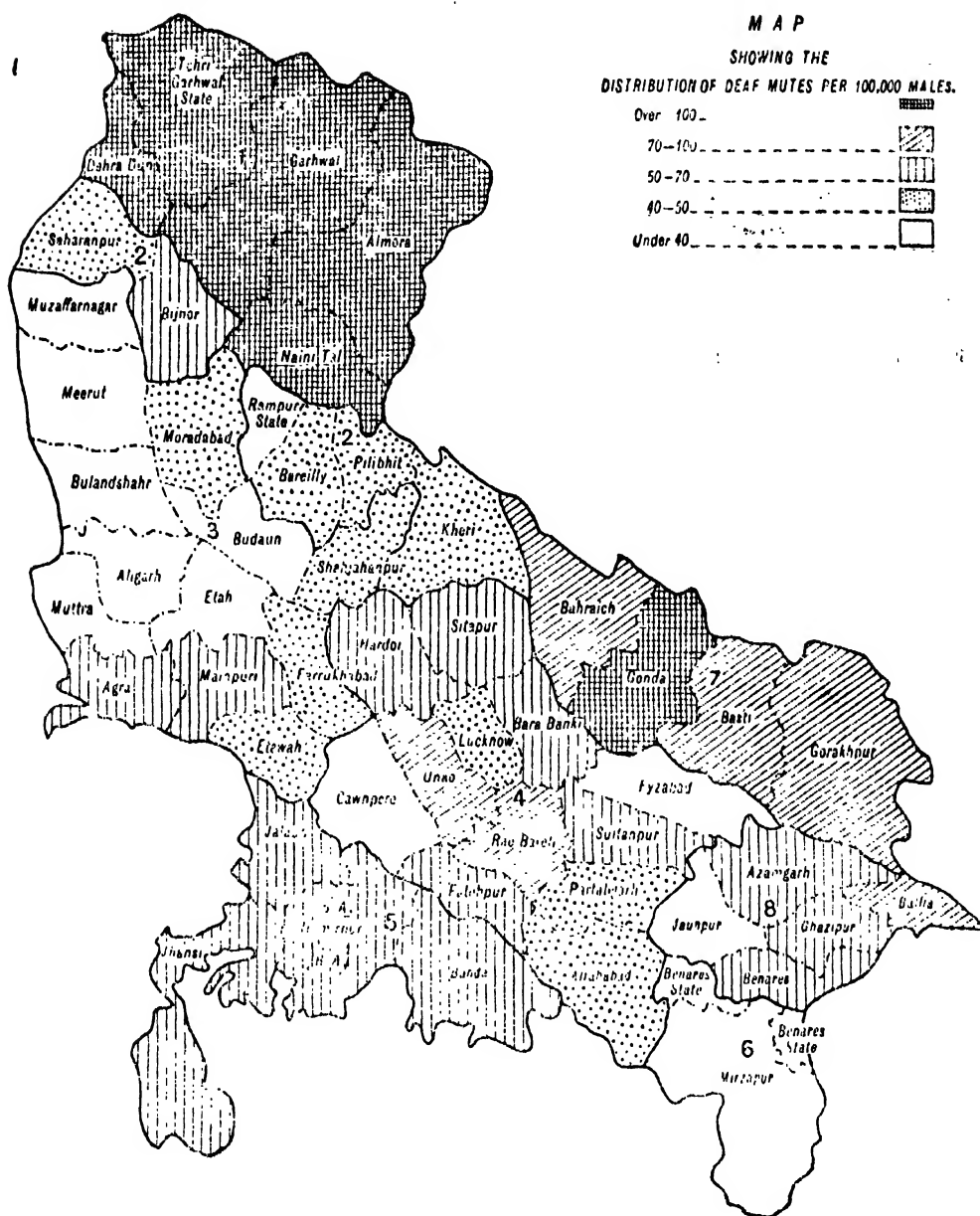


Here again I find it unsafe, if not impossible, to draw any inferences from the statistics. Both tables would at first sight suggest that lunacy begins to be accentuated in both sexes at the age of puberty. But this conclusion cannot be accepted, for the figures for all infirmities are low at

the early ages: the reason being that parents will not admit a child to be permanently defective while there is still a chance that they may be mistaken. It cannot be known how far the increase of lunacy at ages 5—10 and 10—15 is real and how far only apparent. Table II again suggests that lunacy suddenly decreases after age 45, especially in the case of females. But the number of persons living also decreases rapidly at that period, and the suggestion needs to be checked by reference to Table III, which shows the number afflicted per 100,000 of each age period. This Table indicates that the proportion of insane to living males of the same age period is greatest at age 45—50, continuing high for all subsequent age periods, and of insane females is uniformly higher after than before the fortieth year. The explanation may be that lunatics are more long lived than the sane population, and female than male lunatics: which is in accordance with English experience. But this is pure conjecture. It is unsafe to say more than that there is a probability that lunacy is most prevalent at the ages when the passions are in fullest play.

The distribu-
tion of deaf-
mutes.
(i) by locality.

The map showing the distribution of deaf-mutes is illuminating if



examined in conjunction with the corresponding map of 1911. For the greater part of the province it is indeed apparent that the absolute numbers of the afflicted are so small that no conclusions can be drawn from them. But the proportions are, in the main, high in the districts in which they were high in 1911. Of that year Mr. Blunt wrote "the abnormal districts are the four districts and one state lying in the hills, Bijnor lying at their feet, the four districts lying north of the Ghagra . . . and Azamgarh lying south of the Ghagra." Bijnor and Azamgarh are no longer abnormal: Ballia, Unao and Rae Bareilly are now abnormal, but were not so before; these are evidently accidental abnormalities which are always liable to be found where small figures are

Natural Division.	Deaf-mutes per 100,000 males.		
	1901.	1891.	1881.
Himalaya West . .	172	230	250
Sub-Himalaya East	61	156	151
Division next in order.	47	86	81

in question. But deaf-mutes preponderate now, as in 1911, very greatly in the hills (Himalaya West) and appreciably in the Trans-Ghagra tract (Sub-Himalaya East). The same has been the case at every previous census also, as the marginal statement shows.

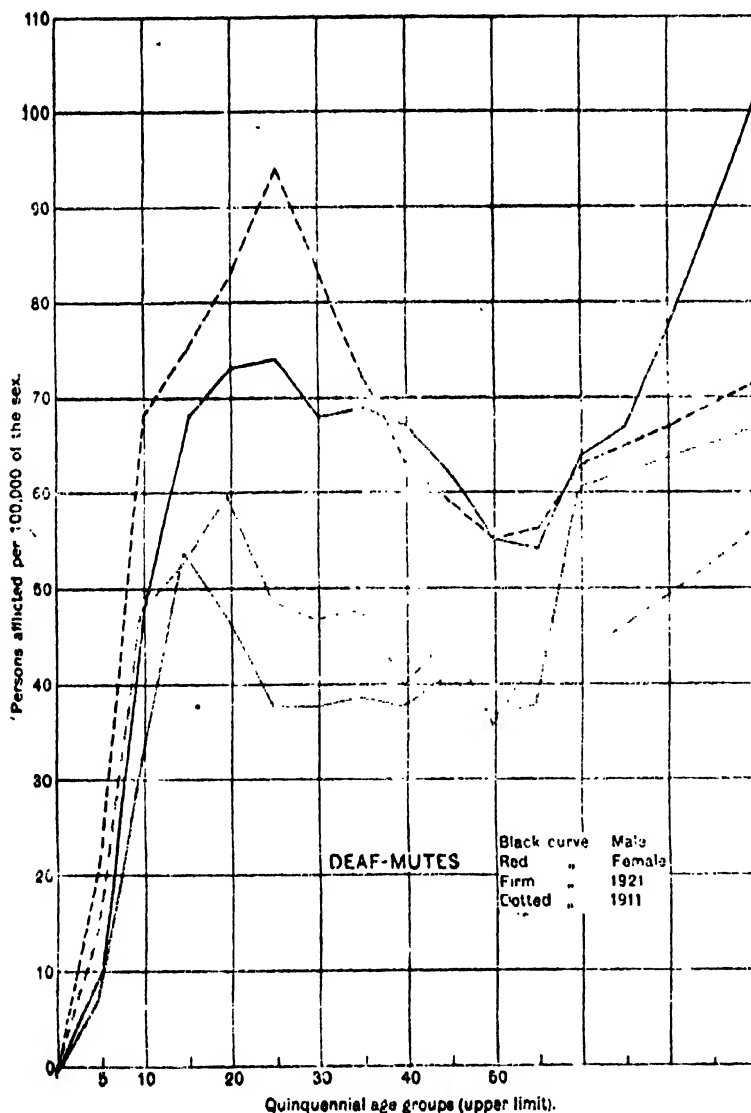
It is unnecessary to repeat the conclusions drawn by Mr. Blunt from this distribution. It is sufficient to say that the present statistics entirely bear them out. In this province deaf-mutism depends on locality. It was proved in 1901* to be closely connected with goitre, and there can be little doubt that it is mainly found along the upper reaches of certain rivers—the Ganges, Jamna and Sarda systems in the hills and the northern tributaries of the Ghagra in Sub-Himalaya East. And it is associated with some rivers more than with others. In the Gorakhpur district the cretins are congregated in the alluvium of the Gandak, in which tract a local word (*bauk*) is used to describe them. They are not commonly found in the lower valley of the Rapti. The view that the prevalence of deaf-mutism is connected with the presence of some mineral carried in water, and that this mineral disappears from rivers soon after they are well clear of the hills, is strongly corroborated by the figures.

At all ages combined there are recorded 584 female to every 1,000 male deaf-mutes. There is no reason to suppose males to be in fact more liable to deaf-mutism than females, and the proportion is only interesting as giving some indication of the extent to which this affliction is concealed. It does not however measure the whole of the concealment, as will be made apparent in the next paragraph. As would be expected, the apparent proportion is lowest at the child-bearing ages, 15–40, as in the case of insanity.

(ii) by sex.

The age distribution of deaf-mutes is shown in the marginal graph. Since

(iii) by age.



deaf-mutism is a congenital defect, the curve can have only an indirect interest, firstly as giving some measure of the accuracy of the figures, and secondly as illustrating the length of life of deaf-mutes relatively to that of the normal population. It is manifest that if the figures were accurate, and if the deaf-mute lived as long as and no longer than any one else, the graph would take the form of a horizontal line. There can be no doubt however that the span of life of deaf-mutes is shorter than normal. The curve therefore should travel continuously downward. In fact it does nothing of the sort. It rises continuously from 0 to 15 in the case of females and to 18 in the case of

males, falls thence onward till age 50 is passed, and rises again more or less continuously for the rest of its journey. The male curve between 18 and 50.

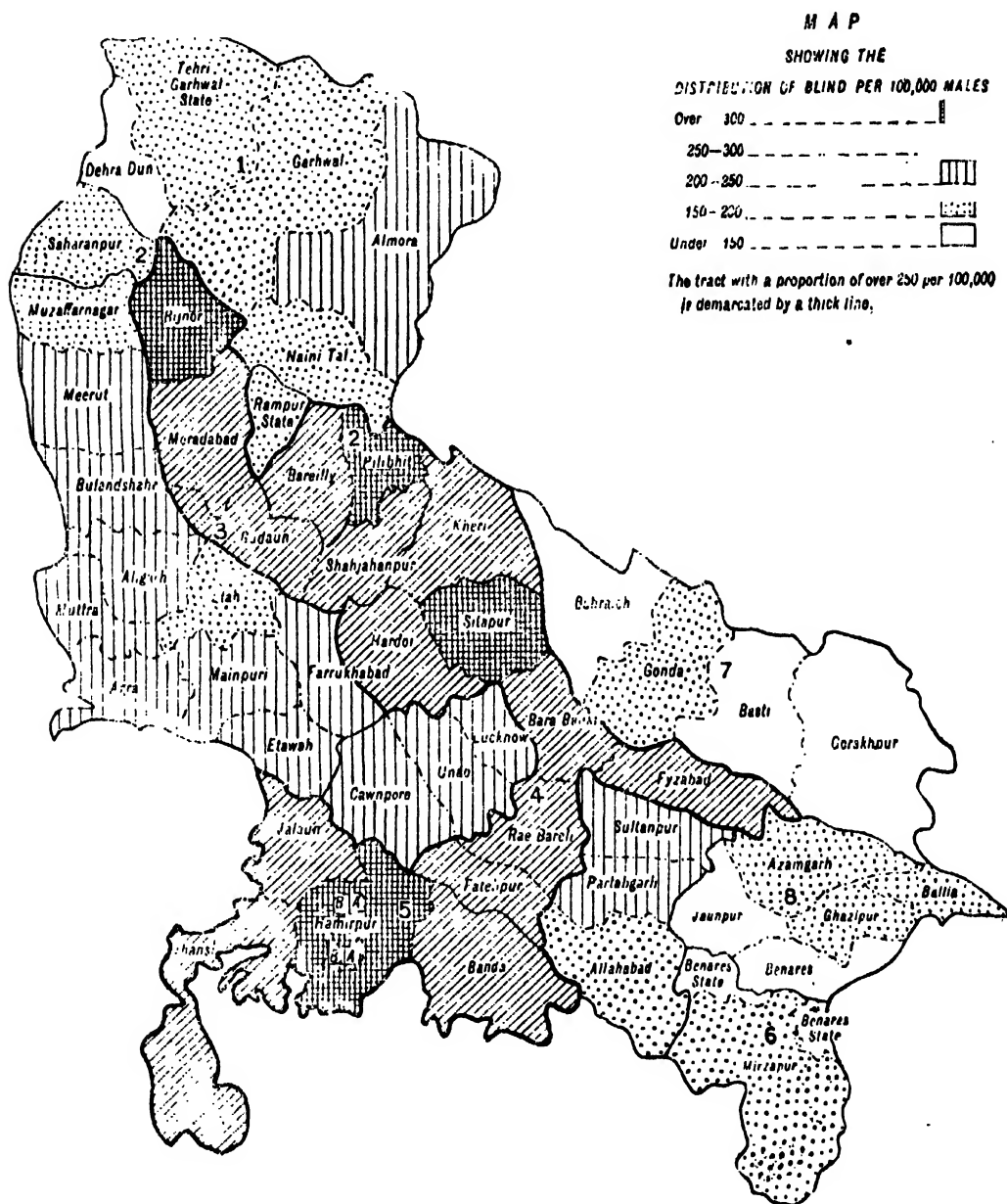
* Census Report, 1901, p. 200. See also Census Report, 1911, pp. 305–308.

probably represents the actual facts: the space enclosed between the male and female curves for this period probably gauges, for this period, the extent of concealment of female affliction. Up to age 18 in the case of males, and age 18 in the case of females, a gradually failing hope is entertained by parents that the defect may not be permanent or may be cured. After age 50 the statistics must clearly be upset by the inclusion of those who become deaf and generally defective in old age.

The mean proportion of deaf-mutism worked out on the above assumption comes to about 71 per 100,000. This proportion would give about 33,000 deaf-mutes. The recorded number is 22,678. The statistics therefore may be taken to understate the facts by about 50 per cent.

The distribution of the blind (i) by locality.

5. A comparison of the map showing the proportional distribution of the



blind with the corresponding map printed in the Report of 1911 (page 309) reveals the fact that the distribution has, with small modifications, remained unchanged. Blindness is most prevalent now, as it was ten years ago, in two main tracts, the Plateau and a block made up of Rohilkhand and the districts of Kheri, Hardoi, Sitapur, Bara Banki and Fyzabad: these two tracts being

connected by a wedge comprising the districts of Fatehpur and Rae Bareilly. Blindness is as before least prevalent in the East generally, in the Himalayas, in the upper part of the Doab, and in the districts of Unao and Lucknow.

This distribution, which is roughly the same as that of 1901 also, appears to discredit certain conclusions generally accepted. It is said that blindness is most widespread in a hot and dry climate where there is much glare and dust : least widespread in a cool damp climate where there is plenty of green to rest the eye. There is as much glare in Agra and Muttra as in Bundelkhand, and much more dust ; Pilibhit is damper and greener than Mainpuri or Farrukhabad. It is also alleged that people who live and cook their meals in small, dark, and ill-ventilated houses are more liable than others to lose their sight. The wattled huts of the East are slightly better ventilated than the mud houses of the West. But both are airy compared with the masonry houses of the hills. It appears to have been assumed hitherto that blindness in the province is generally the result of small-pox or cataract. A senior officer of the Indian Medical Service who has studied the subject has given me his opinion that 75 per cent. of this blindness is due to trachoma, a disease which is associated with dirt, neglect, ill-nutrition and a low standard of civilisation generally ; and which in England is hardly found except among immigrant Russians and Poles. Ill-nutrition is certainly more noticeable in the Plateau than elsewhere, and Pilibhit is probably the poorest district in the province. Investigation on these lines might lead to definite conclusions, but the matter is one for a medical expert.

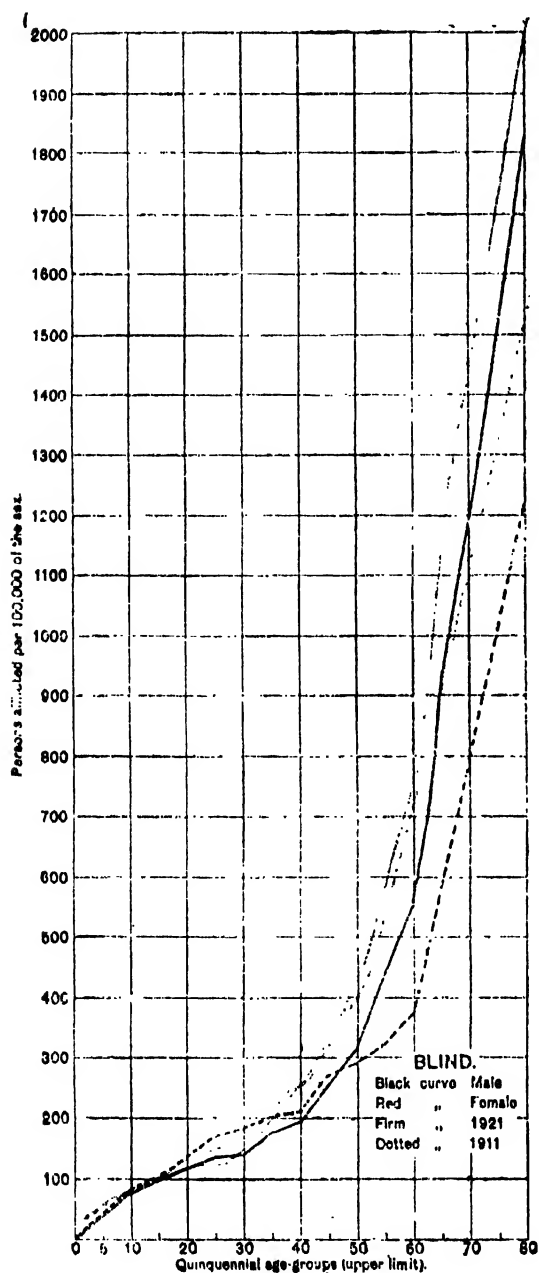
As usual the proportion of blind persons is found to be higher, at all ages combined, among women than among men : for every 1,000 blind men there are 1,068 blind women. From the curve inset in the next paragraph it will be seen that the male proportion is higher at the early ages : the male and female curves cross at age 35. There is probably little concealment of blindness : such as there is will have been attempted in respect of unmarried but still marriageable women. A greater prevalence of blindness among females has been accounted for by the comparative neglect of female children, and by the fact that women spend more of their time than do men in smoky and ill-ventilated rooms. But the preponderance of blind females is greatest in the tract where blindness generally is most prevalent, and it may be due to the custom of the country whereby women dine after the men have finished. Where food is short this custom must tend to result in relative ill-nutrition among women.

(ii) by sex.

(iii) by age.

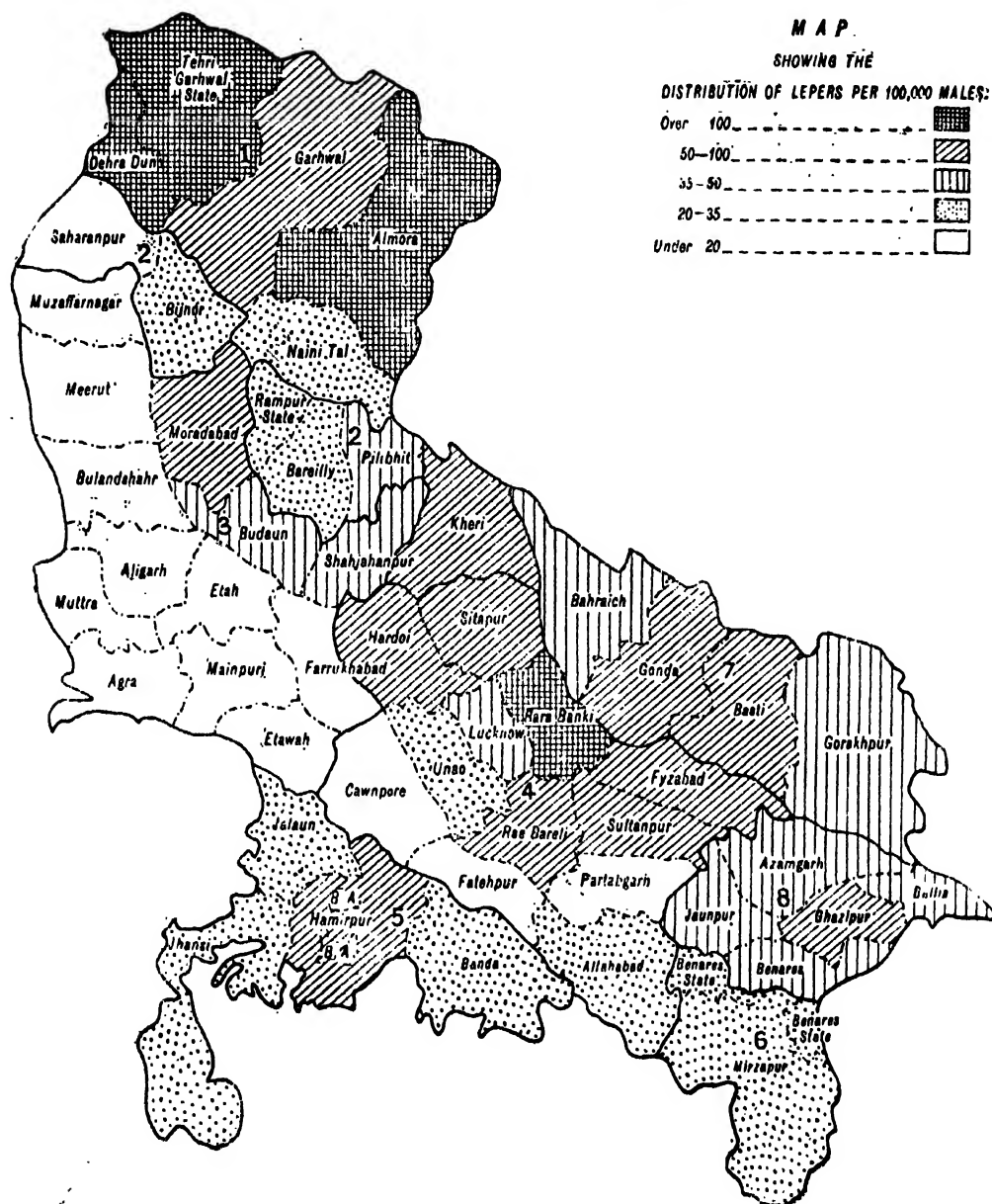
The graph showing the age distribution of the blind is uniform with that of 1911. The curves are such as would be expected, and call for little comment. Blindness is ordinarily an acquired defect, and the proportion to the population of blind persons increases regularly at each age period.

It is disappointing and surprising to find that blindness is more prevalent now than it was ten years ago. Every one who has served in the districts must have witnessed the wonderful work that is being done by Civil Surgeons in relieving this affliction. The reason should probably be looked for in the absence of many of these officers on War service for nearly half the decade.



6. The absolute number of lepers is so small that their distribution can hardly be expected to point to any conclusion. Of the 12,296 lepers found in the province, 919 are lodged in fourteen asylums. In 1911, 538 out of 14,143 lepers were lodged in eighteen asylums. Many of the inmates of asylums come from outside districts, or even from other provinces ; * and such outsiders have

*The distribu-
tion of lepers.
(i) by locality.*



been excluded from the figures on which the inset map is based. The map therefore is based on very little material ; but it probably has more meaning than the corresponding map of 1911, for the figures for males only have been used, those for females being discarded as wholly unreliable.

The map shows the distribution to be, generally speaking, similar to that of 1911. Lepers as before are most numerous in the Himalayas—which fact may be due to their congregation in places of pilgrimage—and curiously in Bara Banki. That the figures should be high in the same places as in 1911 is the more remarkable in that no leper is supposed to live more than 20 years. In Oudh generally lepers are relatively numerous. In the tracts bordering Central India (except in Hamirpur) they are less numerous than in the province

* In the largest asylum, that at Allahabad, out of 482 inmates 356 were born outside the province.

as a whole. The part of the province most free from the disease is very clearly defined—the Ganges-Jamna Doab. No district in the Doab has a proportion as high as 20 per 100,000; and only one district—Partabgarh—outside the Doab has a proportion as low as this.

The map therefore may have a meaning; though what this is I do not presume to guess. Leprosy is probably the most mysterious of diseases, and its causation is wholly unknown. The only accepted method of checking it is by segregation; and the decrease in the number of lepers, combined with the increase in the number of inmates of asylums, suggests that segregation may have achieved some result.

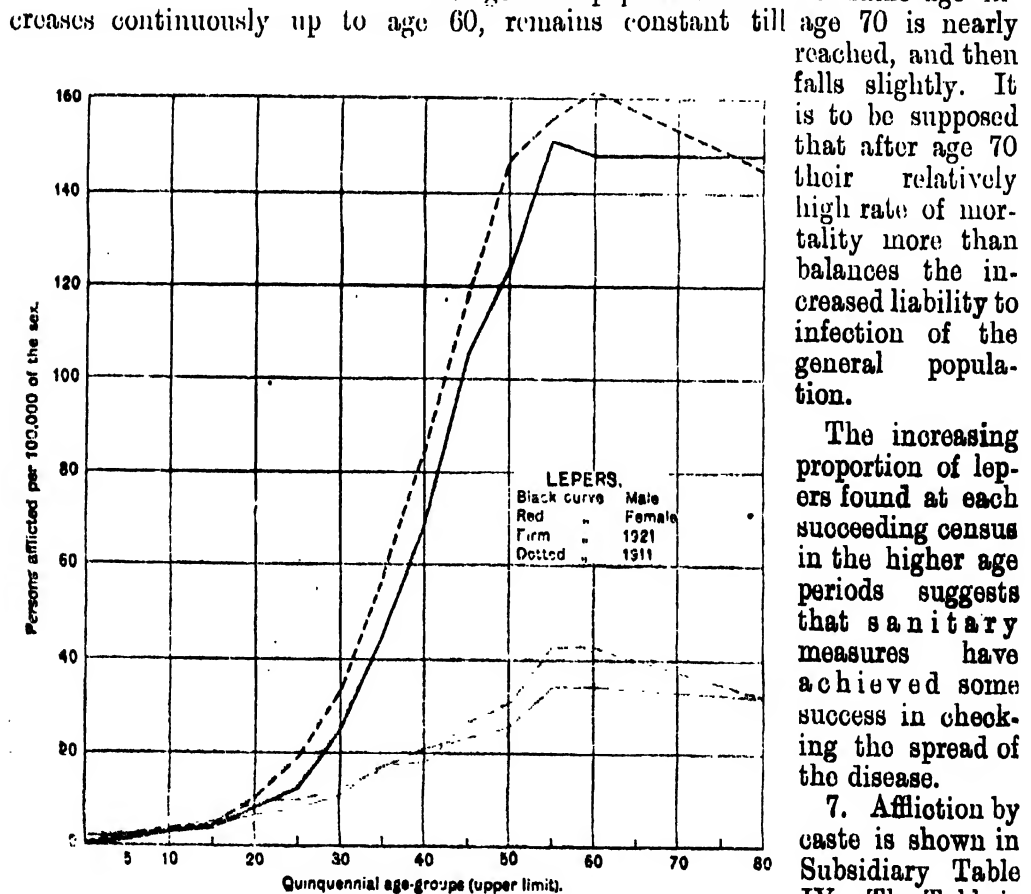
(ii) by sex.

According to the returns there are 217 female to every 1,000 male lepers. These figures are on their face absurd; the medical view is that neither sex is more liable to the disease than the other. As regards the bulk of the population concealment is obviously much more easy for women than for men. In the case of Christians this is not so, nor is there, in view of the provision for lepers made by the missions, so great a motive for concealment. For Christians the proportion of female to male lepers is 893 to 1,000. This is exactly the sex proportion of the whole Christian population; so that the medical view is strongly corroborated.

(iii) by age.

Age period.	1921.	1911.	1901.
0—10	140	65	297
10—20	261	249	507
20—30	745	977	1,122
30—40	1,890	2,103	2,058
40—50	2,839	2,420	2,559
50—60	2,373	2,154	2,000
60 and over	1,752	1,533	1,426
Unspecified			31

The marginal statement shows the distribution by age periods of 10,000 male lepers at this and the last two censuses. Lepers being short-lived—it is said that they seldom survive more than 20 years—it appears that the liability to infection increases with age. This is made more apparent by the graph, which shows the proportion of lepers to 100,000 persons at different age periods. The proportion of lepers to the general population of the same age increases continuously up to age 60, remains constant till age 70 is nearly



reached, and then falls slightly. It is to be supposed that after age 70 their relatively high rate of mortality more than balances the increased liability to infection of the general population.

The increasing proportion of lepers found at each succeeding census in the higher age periods suggests that sanitary measures have achieved some success in checking the spread of the disease.

7. Affliction by caste is shown in Subsidiary Table IV. The Table is perhaps not very

informative. As regards insanity, the Kayasths have far the highest figure followed at a long interval by the Shaikhs. Such was also the case in 1911, but otherwise the figures of this and of the last decade do not correspond very closely. Mr. Blunt's proposition that the Muhamminadans suffer more than the Hindus is

Infirmitics by
caste.

not corroborated: insanity seems to be associated with education rather than with race or religion. Apart from the Kayasths, the Brahmans and Rajputs have high figures; and, very significantly, Christian females. The high figure of the Muraos is to me quite inexplicable. This caste, which is domiciled mainly in Oudh and Rohilkhand, appears to be abnormally liable to all infirmities. The caste statistics of deaf-mutes have no significance: the infirmity is undoubtedly local in its incidence. As regards blindness, the high rate of affliction of Darzis is intelligible: that of Muraos and of Nais is not. It is curious, in view of the theory that blindness is generally due to confinement in dark and smoky houses, that the castes whose women are most afflicted are the Murao, Kori, Kisan, and Kachhi—castes whose women practically without exception work in the fields. There appears to be nothing in common between the castes which have a low rate of affliction—Lunia, Christian, Kewat, Kumhar, Gujar, Rajput.

As regards leprosy, Christians as before have far the highest figure; and also as before the Doms stand next, and the rest are nowhere. The number of Christian lepers is obviously due to the fact that nearly all leper asylums are run by missionaries. And as to the Doms, the great majority of these are domiciled in the Himalayas, where as has been seen already leprosy is more prevalent than elsewhere in the province.

Subsidiary Table I.—Number afflicted per 1,000,000 of

Serial number.	District and Natural division.	Insane.									
		Males.					Females.				
		1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.
		3	4	5	6	7	8	9	10	11	12
	British Territory	203	229	189	158	190	108	118	96	78	93
	<i>Himalaya, West</i>	<i>161</i>	<i>171</i>	<i>170</i>	<i>146</i>	<i>202</i>	<i>148</i>	<i>140</i>	<i>97</i>	<i>86</i>	<i>98</i>
1	Dehra Dun	285	207	379	209	298	595	511	165	251	200
2	Naini Tal	106	202	110	95	62	216	142	58	137	92
3	Almora	136	173	135	153	241	57	85	109	45	19
4	Garhwal	133	127	156	135	187	61	70	50	68	125
	<i>Sub-Himalaya, West</i>	<i>308</i>	<i>340</i>	<i>295</i>	<i>239</i>	<i>273</i>	<i>157</i>	<i>168</i>	<i>147</i>	<i>123</i>	<i>136</i>
5	Saharanpur	155	233	191	191	230	107	115	98	87	15
6	Bareilly	687 (305)	579	595	497	551	285 (160)	281	267	249	251
7	Bijnor	220	197	189	186	164	111	124	115	114	77
8	Pilibhit	201	286	184	105	14	178	84	188	52	57
9	Kheri	146	323	199	114	164	79	174	108	59	80
	<i>Indo-Gangetic Plain, West</i>	<i>216</i>	<i>228</i>	<i>160</i>	<i>144</i>	<i>197</i>	<i>121</i>	<i>118</i>	<i>90</i>	<i>70</i>	<i>92</i>
10	Muzaffarnagar	266	209	170	191	264	70	83	69	110	198
11	Meerut	209	170	190	163	157	119	80	68	57	16
12	Bulandshahr	128	152	172	128	175	75	120	134	49	81
13	Aligarh	137	153	139	91	138	72	81	53	43	92
14	Muttra	126	136	110	123	61	50	98	44	48	29
15	Agra	1,272 (275)	852	148	429	364	402 (142)	407	159	151	154
16	Mathura	180	205	133	188	188	95	89	50	48	72
17	Etah	134	124	167	86	198	71	60	73	50	55
18	Budaun	195	180	145	82	111	123	86	89	68	60
19	Moradabad	156	175	185	111	112	121	111	95	56	81
20	Shahjahanpur	130	205	111	93	254	106	130	91	50	111
21	Farrukhabad	171	188	300	153	253	108	106	153	89	118
22	Etawah	151	204	153	88	170	118	76	87	103	86
	<i>Indo-Gangetic Plain, Central</i>	<i>151</i>	<i>196</i>	<i>188</i>	<i>170</i>	<i>186</i>	<i>98</i>	<i>110</i>	<i>89</i>	<i>89</i>	<i>98</i>
23	Cawnpore	119	180	141	157	221	68	116	65	73	117
24	Fatehpur	170	137	119	92	158	90	89	59	41	18
25	Allahabad	111	169	121	173	239	109	118	47	120	94
26	Lucknow	193	219	665	562	471	160	119	270	229	189
27	Unao	205	163	166	196	178	140	74	82	101	20
28	Rae Bareilly	192	199	222	156	221	95	115	75	85	83
29	Sitapur	156	299	111	141	134	87	201	70	77	84
30	Hardoi	183	198	220	116	171	117	102	67	46	112
31	Fyzabad	158	137	121	143	10	98	80	76	88	67
32	Sultanpur	158	178	137	123	15	90	77	115	90	44
33	Partabgarh	96	137	148	121	188	80	76	64	47	13
34	Bara Banki	147	305	219	142	224	69	146	139	65	91
	<i>Central India Plateau</i>	<i>185</i>	<i>236</i>	<i>146</i>	<i>133</i>	<i>211</i>	<i>120</i>	<i>139</i>	<i>65</i>	<i>68</i>	<i>198</i>
35	Jhansi	141	177	151	183	150	85	103	17	89	143
36	Jalaun	159	220	118	108	260	109	179	41	62	193
37	Hamirpur	237	307	157	92	14	167	187	123	71	65
38	Banda	207	269	127	129	429	127	120	89	52	37
	<i>East Satpuras</i>	<i>157</i>	<i>124</i>	<i>87</i>	<i>81</i>	<i>132</i>	<i>52</i>	<i>81</i>	<i>54</i>	<i>58</i>	<i>65</i>
39	Mirzapur	157	124	87	81	132	52	81	54	58	65
	<i>Sub-Himalaya, East</i>	<i>134</i>	<i>243</i>	<i>178</i>	<i>111</i>	<i>140</i>	<i>71</i>	<i>119</i>	<i>129</i>	<i>53</i>	<i>51</i>
40	Gorakhpur	129	238	165	109	153	78	118	161	58	47
41	Basti	135	134	93	95	120	90	72	68	50	46
42	Gonda	167	294	129	109	89	60	133	83	48	44
43	Bahraich	101	374	423	149	29	47	191	231	50	84
	<i>Indo-Gangetic Plain, East</i>	<i>261</i>	<i>232</i>	<i>229</i>	<i>187</i>	<i>170</i>	<i>112</i>	<i>89</i>	<i>60</i>	<i>70</i>	<i>69</i>
44	Benares	769†	677	892	548	410	248†	238	78	266	186
45	Jaunpur	120	148	119	158	159	53	55	54	38	74
46	Ghazipur	115	98	94	103	91	71	57	41	49	47
47	Ballia	300	108	116	155	191	146	61	68	28	84
48	Azamgarh	121	141	13	88	48	81	61	65	31	34
	States	160	..	..	..	..	112	..	..	..	..
49	Tehri-Garhwal (Himalaya, West)	294	256	105	180	224	161	171	103	49	72
50	Rampur (Sub-Himalaya, West)	123	131	100	62	276	128	44	67	73	107
51	Benares (East Satpuras)	94	..	..	..	..	50	..	..	..	..

* The figures shown in brackets against the districts of Bareilly and Agra under the head "Insane" and opposite various
† This figure includes in proportion 288 male and 69 female inmates of the asylum.

*the population at each of the last five censuses.**

Deaf-mute.										Blind.										Serial number.
Males.					Females.					Males.					Females.					
1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	1921.	1911.	1901.	1891.	1881.	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
602	666	462	873	769	388	449	273	516	473	2,172	2,088	1,681	2,282	2,691	2,517	2,356	1,784	2,410	3,217	1
1,550	1,876	1,716	2,299	2,501	1,100	1,408	1,203	1,442	1,665	1,804	1,613	1,388	1,697	1,942	2,695	1,963	1,543	1,812	2,413	2
1,536	2,638	904	2,811	2,191	1,833	2,578	716	3,037	2,363	1,478	1,522	1,021	1,605	1,714	3,152	2,448	1,154	1,784	2,031	3
1,070	1,012	665	892	538	810	768	658	655	396	1,809	1,794	1,318	2,209	2,241	2,380	2,035	1,635	2,250	2,062	4
1,965	2,491	2,809	2,930	3,245	1,246	1,655	1,706	1,532	1,883	2,051	1,816	1,588	1,716	2,060	2,940	2,255	1,772	1,555	2,568	5
1,417	1,468	1,749	1,837	2,823	840	1,113	1,186	1,108	1,778	1,696	1,293	1,399	1,423	1,979	2,124	1,449	1,379	1,952	4,105	6
458	594	359	865	811	261	420	198	560	529	2,610	2,619	2,136	2,682	3,409	3,007	2,899	2,213	2,967	4,160	7
413	601	225	648	634	225	402	112	406	387	1,807	1,941	2,202	2,634	2,627	1,770	1,875	2,479	2,744	4,125	8
474	546	477	774	629	232	355	202	431	367	2,807	2,666	2,284	2,535	3,270	2,968	2,761	2,407	2,859	4,610	9
516	721	258	744	861	286	507	153	599	668	3,073	2,984	1,802	2,722	3,003	3,228	2,533	2,644	3,996	3,111	10
419	611	509	650	555	276	412	336	422	41	3,280	2,412	1,931	2,283	2,272	4,052	2,628	2,016	2,265	4,368	11
460	465	387	1,436	1,373	196	455	258	9-0	850	2,083	3,167	1,504	2,842	3,967	3,580	3,674	1,637	2,796	5,304	12
416	559	304	605	607	266	354	170	361	374	2,326	3,265	1,824	2,508	2,992	2,420	2,306	1,848	2,590	3,565	13
242	542	241	8-8	94	150	358	93	440	528	1,040	2,275	2,022	3,520	5,095	1,768	1,805	1,726	3,429	3,018	14
387	549	160	586	481	257	366	81	359	297	2,490	2,046	1,707	2,655	2,958	2,735	2,143	1,584	2,578	2,976	15
308	548	179	583	524	216	309	98	318	245	2,164	2,340	1,779	2,404	2,677	2,010	2,100	2,033	2,619	3,699	16
391	608	191	480	441	268	321	85	231	247	2,217	2,384	1,802	1,700	2,865	2,391	2,492	1,581	1,641	3,012	17
375	553	232	703	45	184	400	240	391	190	2,476	2,385	1,931	3,376	2,136	2,815	3,108	2,155	4,048	2,931	18
547	628	188	648	448	318	362	122	414	259	2,320	2,126	1,557	2,644	3,125	2,770	2,418	1,973	2,959	3,165	19
585	435	417	463	54	228	284	201	258	29	2,048	1,875	1,679	2,279	2,271	1,674	1,768	1,011	2,175	3,176	20
398	415	598	619	585	271	317	227	196	379	1,968	2,063	1,870	2,156	2,719	1,780	1,912	1,735	2,267	4,022	21
392	611	427	679	616	237	416	288	349	317	2,805	2,471	2,177	2,730	3,018	2,475	2,148	2,277	2,561	3,07	22
485	655	482	520	1,222	307	452	268	335	934	2,760	2,392	2,169	3,055	3,102	2,860	2,742	2,737	3,300	4,687	23
428	631	411	494	54	282	382	225	191	373	2,824	2,722	2,083	1,771	4,441	2,613	2,693	1,971	1,848	4,547	24
486	453	367	646	493	258	313	240	424	381	2,174	2,243	1,407	2,022	2,769	2,138	2,074	1,172	1,757	2,917	25
405	478	303	716	517	258	282	252	480	269	2,162	2,131	1,576	2,331	2,550	2,800	2,649	1,854	2,632	365	26
573	489	468	719	577	382	350	305	419	359	2,515	2,432	2,160	2,833	3,243	3,183	2,987	2,559	3,123	4,184	27
244	347	291	791	580	223	253	178	455	358	2,410	2,187	1,727	2,922	2,965	3,192	2,850	1,980	3,233	4,546	28
536	511	441	359	489	354	398	326	212	397	2,992	2,941	2,201	2,821	2,989	4,253	3,801	3,012	3,192	4,737	29
479	5-9	467	618	74	317	369	173	353	427	1,707	1,854	1,276	1,785	3,259	1,817	2,387	1,027	1,556	1,574	30
436	398	456	7-0	49	305	333	344	521	374	2,158	2,219	2,151	3,220	3,366	3,000	3,293	3,476	4,464	4,713	31
712	400	547	504	573	510	356	306	306	315	2,433	2,614	2,880	2,836	3,305	3,390	3,041	3,103	3,124	3,689	32
748	512	512	735	639	462	376	588	407	429	2,962	2,685	2,558	3,495	3,330	3,851	3,312	3,223	3,771	4,557	33
565	513	447	820	634	378	391	274	464	283	3,375	3,523	2,346	3,339	2,990	4,900	1,951	2,880	3,949	2,991	34
645	339	407	543	427	394	207	284	248	272	2,620	2,315	2,511	2,141	3,024	3,445	2,798	2,988	2,175	2,546	35
751	648	588	855	499	485	406	399	489	336	2,530	2,187	2,023	3,066	2,404	2,894	2,477	2,211	3,349	2,963	36
666	605	485	967	442	374	434	295	565	249	2,457	2,200	1,918	3,254	2,002	2,612	2,298	2,168	3,306	5,914	37
458	474	522	757	369	431	326	349	425	251	2,063	2,070	2,074	2,759	3,054	2,077	1,945	2,616	2,570	4,265	38
505	508	485	801	942	258	356	422	480	560	2,700	2,586	2,330	2,941	4,070	3,660	3,284	3,017	3,610	4,704	39
651	448	414	825	560	416	325	234	553	392	2,808	2,393	1,704	2,605	3,004	5,250	4,308	2,627	3,931	4,397	40
700	431	299	857	445	406	318	113	552	268	2,770	2,342	1,275	2,510	2,478	5,400	4,258	1,732	4,224	1,949	41
661	473	383	1,024	437	422	405	264	775	337	2,605	2,658	1,231	2,019	3,382	5,254	5,183	2,600	2,001	4,945	42
680	451	5-0	902	619	496	260	310	597	444	3,334	2,695	2,011	3,097	3,068	6,475	1,822	4,042	4,642	3,124	43
590	449	444	622	663	397	332	207	401	230	2,608	2,068	1,269	2,648	3,177	4,367	3,470	2,377	3,875	2,798	44
396	431	419	517	555	268	251	252	314	309	1,533	1,276	1,082	1,145	1,795	1,860	1,386	1,010	1,135	1,949	45
396	431	419	517	555	268	251	252	314	309	1,533	1,276	1,082	1,145	1,794	1,860	1,386	1,010	1,135	1,949	46
766	1,116	609	1,566	1,510	548	716	334	861	883	1,357	1,363	765	1,365	1,614	1,330	1,359	665	1,147	1,685	47
773	1,231	475	1,854	1,696	499	794	303	1,050	1,018	923	1,161	440	1,097	2,950	8-7	1,057	281	958	1,502	48
790	1,022	530	921	1,154	516	630	282	438	574	1,387	1,379	779	1,479	1,847	1,396	1,344	733	1,050	2,576	49
1,340	1,164	725	1,290	1,274	653	663	267	621	671	1,704	1,616	771	1,294	1,583	1,988	1,823	615	1,215	1,715	50
795	878	959	2,248	1,938	612	682	608	1,424	1,351	1,430	3,381	1,605	2,032	2,402	2,730	1,733	1,736	1,942	2,166	51
553	570	436	690	400	350	364	231	390												

Subsidiary Table I.—Number afflicted per 1,000,000 of the population at each of the last five censuses—(concluded).

Serial number.	District and natural division.			Loper									
				Males.					Females.				
				1921.*	1911.	1901	1891.	1881	1921.*	1911	1901.	1891.	1881
				33	34	35	36	37	38	39	40	41	42
1	British Territory	..	..	425	480	359	574	630	106	111	108	130	156
	Himalaya, West	..	..	1,024	1,468	1,719	2,209	2,333	576	710	779	958	906
1	Dehra Dun	..	..	1,310 (1,194)	1,534	1,908	2,512	2,250	630 (548)	570	282	1,372	1,216
2	Naini Tal	..	..	280	552	418	217	177	242	249	282	84	21
3	Almora	..	..	1,451 (1,406)	2,112	2,636	2,730	3,453	807 (804)	1,102	1,322	1,141	1,231
4	Garhwal	..	..	893	1,421	1,968	2,431	1,304	468	700	710	989	984
	Sub-Himalaya, West	..	..	330	383	288	450	550	54	70	85	70	98
5	Saharanpur	..	..	122 (54)	211	123	248	321	93 (33)	74	17	87	98
6	Bareilly	..	..	349	387	364	556	673	38	44	59	39	69
7	Bijnor	..	..	251	344	452	576	18	29	92	94	104	14
8	Pilibhit	..	..	441	374	377	430	492	59	40	95	35	62
9	Kheri	..	..	540	598	505	456	654	54	92	178	45	85
	Indo-Gangetic Plain, West	..	..	212	252	243	382	540	31	37	63	64	141
10	Muzaffarnagar	..	..	26	76	132	268	513	0	5	84	71	60
11	Meerut	..	..	91 (60)	131	130	313	461	61 (28)	49	47	87	78
12	Bulandshahr	..	..	130	209	255	413	530	20	32	97	76	118
13	Aligarh	..	..	120	156	161	208	330	8	30	34	29	37
14	Muttra	..	..	114	136	169	361	211	43	20	45	45	38
15	Agra	..	..	118 (88)	149	207	319	197	24 (22)	32	77	67	21
16	Mainpuri	..	..	99	146	142	226	33	7	14	24	12	47
17	Etah	..	..	145	234	296	384	512	39	40	48	47	48
18	Budaun	..	..	483 (483)	526	410	548	673	38 (36)	59	85	14	73
19	Moradabad	..	..	565 (559)	503	416	928	1,113	52 (52)	87	71	180	706
20	Shahjahanpur	..	..	477 (473)	604	416	434	911	57 (57)	44	40	85	87
21	Farrukhabad	..	..	190	192	272	207	318	31	15	124	41	37
22	Etawah	..	..	106	113	130	149	22	24	20	27	15	7
	Indo-Gangetic Plain, Central	..	..	550	540	432	635	596	121	106	84	132	118
23	Cawnpore	..	..	150	156	99	316	390	65	31	22	57	46
24	Fatehpur	..	..	193	197	157	151	342	26	64	42	118	11
25	Allahabad	..	..	495 (312)	372	141	323	379	358 (70)	154	60	194	14
26	Lucknow	..	..	502 (467)	663	636	754	561	87 (87)	65	68	156	126
27	Unao	..	..	346	397	457	558	590	60	53	73	80	11
28	Rao Bareilly	..	..	569	542	627	782	651	108	125	89	178	137
29	Sitapur	..	..	741	785	460	991	721	61	100	61	85	71
30	Hardoi	..	..	618	456	462	453	598	40	53	67	56	41
31	Fyzabad	..	..	877	869	702	1,048	671	142	199	117	185	117
32	Sultanpur	..	..	671	702	494	811	392	149	137	138	178	127
33	Partabgarh	..	..	156	165	242	341	433	50	69	90	187	197
34	B. ra Banki	..	..	1,050	1,071	758	1,263	1,755	146	154	144	215	186
	Central India Plateau	..	..	363	413	298	752	856	168	222	137	223	53
35	Jhansi	..	..	314	386	193	582	677	127	176	73	284	156
36	Jalaun	..	..	258	348	136	529	676	94	139	129	151	126
37	Hamirpur	..	..	580	511	500	959	820	288	304	215	895	237
38	Banda	..	..	318	416	330	899	1,182	174	262	182	367	1,238
	East Satpuras	..	..	337	324	257	360	576	146	96	83	113	121
39	Mirzapur	..	..	337	324	257	360	576	146	96	83	113	121
	Sub-Himalaya, East	..	..	540	658	303	538	602	103	120	131	90	113
40	Gorakhpur	..	..	478	707	237	578	617	86	123	159	98	116
41	Basti	..	..	658	700	378	615	712	140	129	119	91	135
42	Gonda	..	..	650	625	290	397	479	192	134	125	84	13
43	Bahraich	..	..	358	488	371	355	588	61	82	67	53	61
	Indo-Gangetic Plain, East	..	..	429	449	298	529	544	71	97	82	93	83
44	Benares	..	..	401 (382)	378	329	563	431	118 (111)	117	147	112	1134
45	Jaunpur	..	..	374	449	278	285	365	76	109	80	67	77
46	Ghazipur	..	..	574	376	353	641	856	54	91	94	125	114
47	Ballia	..	..	486	420	281	667	111	54	47	47	63	17
48	Azamgarh	..	..	374	552	276	547	196	67	109	65	100	36
	States	..	..	417	..	..	..	..	179	..	..	..	..
49	Tehri-Garhwal (Himalaya, West)	..	..	1,000	1,590	1,684	2,112	3,238	402	551	561	488	800
50	Rampur (Sub-Himalaya, West)	..	..	202	170	260	213	390	67	36	24	27	62
51	Benares (East Satpuras)	..	..	215	..	..	..	..	110	..	..	..	..

* See note on page 146.

[illegible]

Subsidiary Table III.—*Number afflicted per 100,000 persons of each age-period and sex, and number of females afflicted per 1,000 males. (British Districts.)*

Age.	Number afflicted per 100,000.								Number of females afflicted per 1,000 males			
	Insane.		Deaf-mute		Blind		Lepor		Insane.	Deaf-mute.	Blind.	Lepor.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13
All ages ..	20	11	60	39	217	152	42	11	483	584	1,068	217
0—5 ..	2	1	10	8	41	31	1	1	609	772	775	853
5—10 ..	6	4	48	33	77	53	3	1	624	621	620	243
10—15 ..	13	10	68	55	98	79	4	2	624	620	613	470
15—20 ..	19	13	73	48	116	89	8	4	537	518	622	413
20—25 ..	25	13	74	39	135	91	12	5	453	508	656	401
25—30 ..	33	14	68	39	142	124	25	8	492	532	807	305
30—35 ..	32	12	63	40	175	173	45	14	368	540	967	283
35—40 ..	35	15	67	39	193	233	76	18	381	518	1,071	231
40—45 ..	31	17	62	42	158	328	105	10	505	643	1,198	184
45—50 ..	35	17	55	38	317	425	124	22	402	585	1,113	154
50—55 ..	27	16	54	39	452	667	161	30	560	674	1,245	186
55—60 ..	27	16	64	62	556	765	149	30	533	845	1,193	173
60 and over ..	24	7	114	67	1,270	1,618	148	28	744	617	1,340	198

Subsidiary Table IV.—*Number afflicted per 100,000 persons of each caste, and number of females afflicted per 1,000 males. (Districts and States.)*

Age.	Number afflicted per 100,000								Number of females afflicted per 1,000 afflicted males.			
	Insane.		Deaf-mute.		Blind.		Lepor.		Insane.	Deaf-mute.	Blind.	Lepor.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
Ahir ..	12	11	59	44	195	192	34	8	831	671	883	214
Bachai ..	14	8	54	19	254	207	15	8	487	458	709	155
Bhangi ..	8	13	31	35	207	219	15	3	1,438	1,016	967	179
Brahmau ..	31	12	77	44	233	234	45	11	347	506	900	225
Chamar ..	12	8	43	32	218	196	58	8	616	700	1,303	202
Christian ..	24	34	40	51	136	365	311	330	1,230	1,045	1,885	893
Darzi ..	19	11	33	37	302	301	21	31	522	1,000	838	160
Dhobi ..	11	7	58	42	215	189	46	8	600	184	1,254	155
Dhumia ..	11	8	52	29	169	211	49	6	700	549	1,196	124
Dom* ..	22	14	216	174	202	258	147	77	618	768	1,214	498
Faqir ..	28	14	58	39	258	260	39	8	433	579	880	172
Gadariya ..	10	8	35	20	188	290	32	5	735	511	1,384	140
Gujar ..	11	5	24	19	188	223	12	5	381	669	931	318
Jat ..	18	7	39	37	250	259	14	2	307	718	790	103
Julaha ..	16	5	61	44	260	271	31	6	685	667	1,002	163
Kachhi ..	20	16	47	30	243	323	34	12	685	549	1,172	303
Kahar ..	28	13	59	47	235	285	43	10	445	738	1,134	223
Kayasth ..	62	20	69	38	236	224	27	4	278	471	821	132
Kewat ..	14	9	38	25	134	177	49	14	629	663	1,316	288
Kisan ..	13	8	37	21	275	351	44	4	478	477	1,056	77
Kori ..	11	14	50	45	217	355	44	13	1,322	868	1,580	282
Kumhar ..	10	7	53	22	166	231	34	6	629	383	1,301	161
Kurmi ..	15	8	58	34	220	268	64	10	503	537	1,111	145
Lodha ..	14	10	54	36	215	298	25	6	646	605	1,253	223
Lohar ..	24	10	77	44	208	200	49	7	306	518	853	121
Luniya ..	12	10	40	32	124	142	38	9	840	800	1,124	232
Mali ..	13	9	55	25	221	289	42	10	615	400	942	214
Murao ..	35	15	118	72	315	407	98	7	380	552	1,164	63
Nai ..	18	10	66	39	278	331	44	5	494	537	1,083	112
Pasi ..	9	10	50	42	291	279	56	9	1,046	805	1,386	163
Pathan ..	35	14	86	44	232	217	54	3	359	490	840	43
Rajput ..	29	9	78	47	182	185	53	17	272	530	893	277
Shaikh ..	32	24	78	52	243	244	36	8	650	592	892	190

* Incl. for depressed classes (Hills).

Chapter XI.—CASTE, TRIBE, RACE OR NATIONALITY. ,

The statistics of caste and race are set out in Imperial Table XIII. These have been prepared not for all (or practically all) castes as at last census, but for selected castes only : the selection being based principally on numerical importance, partly on social or ethnological interest. Sub-castes are shown only for Rajputs.

The statistics
and their
accuracy.

The subject of caste was wholly exhausted in 1911, and a deliberate attempt was made at the present census to put it in the background. To succeed in this attempt proved difficult, because it is the subject connected with the census which above all others interests the public. The public after all is predominantly Hindu : and to a Hindu his age, his civil condition, his birthplace, even his occupation are, relatively to his caste, matters of indifference. His caste and nothing else will determine the estimation in which he is held by his neighbours, and the zeal of no reformer has in the smallest degree altered this fact. The enumerating staff was as interested in caste questions as the general public, and as a caste index was supplied to help in cases where the correct entry was difficult to determine, it follows that there was little chance of inaccuracy in the statistics due to carelessness. The danger of inaccuracy lay rather in deliberate misstatement. As before, a large number of castes put forward claims to be classified as Brahmans or Rajputs whose claims are not admitted by the general community. These claims were generally pressed with the greatest determination and persistence, *sabhas* and *mahasabhas* often being formed for no other purpose, treatises being published, and eminent counsel being briefed. A Census Superintendent is obviously not a College of Heralds ; yet few could be made to understand that even if I decided that a Bhat is a Brahman, my decision would bind no one. The course I followed in these controversies was to correspond with the *sabhas*, to listen to the eminent counsel, and not to read the treatises ; and then to instruct the enumerating staff to enter in the caste column the name by which a man's caste was known to his neighbours. This persecution was bad enough when practised by communities : it became intolerable when, after the preliminary count had begun, it was taken up by individuals. I warned a friend with whom I was staying early in March, 1921 that on going out in the morning he would see a respectable old gentleman in a frock-coat sitting under a tree. "Who will he be?" he asked. "A prosperous Chamar who wants to be put down in the census as a Rajput" I replied. How did I know he would be a Chamar? Because the ambitious of all other castes had, to the best of my belief, already stated their case. The old gentleman was duly found under his tree. But he was not a Chamar. He was a Badhik.

In the margin I give a list of some of the communities which claim to be something other than what the world calls them. They vary in importance from

a large caste such as the Kachhis to some seventy-five families in Aligarh who were recorded as Barhais, but who alleged that they are Maithil Brahmans.

The danger of inaccuracy arising from these claims is not however very great. In the first place the claims were generally resisted by the enumerators, who had as large a share of human nature as anyone else. In the second place the claimants in all cases had put me in possession of the name they wished to use. And to restore the popular name in the course of tabulation was a matter of no difficulty.

Name of community in popular use.	Name claimed.
Belwar, Taga	Kokas Panchal Brahman.
Bhujinhar	Bhujinhar Brahman.
Bhat	Brahmbhatt.
Barhai	Maithil Brahman.
Sonar	Ma'hur Rajput.
Sonar	Mair Rajput.
Kachhi	Kachhwaha Chattri.
Kalwar	Batham Vaish.
Rawani, Kahar	Chandra Vanshya Kshattriya.
Barhai, Lohar	Dhiman Brahman.
Tamboli	Nagbansi Kshattriya.
Lodha	Lodhi Rajput.
Kurmi	Kurmi Kshattriya.
Khatttri	Kshattriya.
Ahir	Ahir Kshattriya.
Khanger	Khanger Rajput.
Gadariya	Pali Rajput.
Mallah	Nishada.
Halwai	Yogya Saini Vaish. Kanya Kubta Vaish.

The case of the Muhammadans is not on all fours with that of the Hindus. That the prosperous among the Julahas, Kambohs and other castes become Shaikhs, and the prosperous among the Shaikhs become Saiyids is well known and a subject of popular jest. But the Muhammadan is much looser than the Hindu caste system, and I should be inclined to say that a man who got himself recorded as a Shaikh or a Saiyid is a Shaikh or Saiyid for all purposes that matter.

Lastly mistakes may have been made in the abstraction offices owing to difficulties of spelling, especially where the Urdu script was dealt with: Ahir and Ahar, Barai and Barhai, Koeri and Kori are all apt to be confused where the writing is bad, or owing to the use of sub-caste names, since many of these are common to several castes. Such mistakes, however, are certainly not numerous; and where any evidence, such as a comparison with previous returns, suggested something amiss, the figures have been rechecked.

On the whole the statistics may be accepted as reasonably accurate as regards caste, and still more so as regards race, except that, as I have said elsewhere, a number of Europeans owing to their habits of life undoubtedly escaped enumeration altogether.

*The
demographic
value of the
statistics.*

2. With the caste system generally and especially with the ethnographic side of it I do not propose to deal. The eleventh chapter of the last report is a monograph on the subject, which the developments of ten years are not sufficient to render out of date. An exception, however, has been made to this rule in an appendix, which treats of the depressed classes of the hills. These classes, who have hitherto been lumped together as "Doms"—a name very naturally and properly disliked by its bearers—are breaking up or have broken up into separate castes, and the process so closely resembles what is generally supposed to have been the origin of the "Sudra" castes in the plains that it may be found of interest.

A proposal was seriously made that at the present census caste should not be recorded at all. So far as this proposal was based on a view that caste is unimportant, it shows, as has been pointed out, a complete misconception of popular sentiment. During the decade caste has been attacked from several sides: by reformers impressed by its disadvantages as an obstacle to industrial progress and to the development of a national consciousness—by the disintegrating influences of modern and Western ideas—and by the incompatibility of caste rules with military service abroad and with the conditions of factory life. It has resisted all these attacks: thanks partly perhaps to the innate conservatism of the people, partly to vested interests—the popular leaders being those who benefit by it most—and partly to the very great advantages of the system as an insurance against destitution: advantages which its detractors seem apt to overlook. Caste restrictions may have been relaxed somewhat in private. When travelling down an uninhabited valley I was surprised to find that the Hindus with me, consisting of a hill Brahman, two hill Rajputs and a Dhimar of the plains (of whom the Brahman and one Rajput had been on service overseas) had formed a common mess. But I doubt whether they have been relaxed at all in public. When my journey brought me to a small town the mess was broken up, and all allusion to it was avoided afterwards. The only community which has in some degree succeeded in freeing itself from caste is that of the Aryas.

If the caste system is still generally important because it maintains to the full its hold upon the people, it derives from this fact particular importance in other respects. The tendency in caste movement is wholly upward. The long queue seeking admittance into the ranks of the Brahmans and the Rajputs has already been alluded to. The process of fission by which sub-castes seek to constitute themselves into separate castes, which was fully dealt with by Mr. Blunt in 1911, is still going on; and the object of the process is always to better social status. Now the higher the caste the greater the restriction on the liberty of the individual: the fewer the kinds of work he can do, the more limited the circle within which he can marry, the fewer the classes of people with whom he can consort. It is unnecessary to labour the matter: it is obvious that the perpetuation of the caste system must act as a hindrance to industrial expansion and to racial development.

*Strength and
variation of
selected castes.
(1) Hindus.*

3. The strength of the principal castes—grouped as far as possible according to their general occupation—and their percentage of increase or decrease during the last two decades is shown in the subsidiary table. A decrease since

1911 of between 3 and 4 per cent. would be the normal expectation for any given caste: where this amount of variation is very widely departed from a simple explanation is generally forthcoming. The big increase of the Bhuinhars, who are undoubtedly secular Brahmans, can only be due to a more accurate record of this caste, much of which must have been merged in the Brahman figures of 1911. The Sainthwars have increased owing to their more complete fission from the parent Kurmi community. The Koeris have increased slightly (while closely allied castes such as the Kachhis, Kisans and Lodhas have suffered heavy losses) and the Koris have lost excessively, probably because these two communities were confused in 1911 as has been shown in Chapter VIII to be probable from the literacy figures. The big increase of the Ahars is clearly due to confusion in the central offices between "Ahar" and "Ahir." The Ahars and Ahirs combined show a slight decrease. I can suggest no reason for the large loss suffered by the Dhunias and Thatheras. That suffered by the Bhangis and Doms (plains) may be due to conversion to Christianity. Faqir and Goshain are largely interchangeable terms. The Bhats have evidently succeeded to a considerable extent in getting themselves recorded as Brahmans. The Haburas wander between this and other provinces.

For the rest there is little to be said. The outstanding feature of the statistics is perhaps the disproportionate loss suffered by the big agricultural castes which cultivate small holdings almost entirely by their own labour—the Kachhis, Kisans, Kurmis, Lodhas and Muraos. As has been shown elsewhere—in speaking of the influenza epidemic—there is good reason why this should be so. Another remarkable phenomenon is that the so-called "Dravidian" tribes have not shared in the general decline, but have increased in numbers—the Bhars, Bhoksas, Tharus and Kols. Of occupational groups the traders have weathered the decade best, the labourers next best. For both these communities the decade has been a prosperous one.

4. The Muhammadan caste figures need similar annotation. The increase of Gaddis must be due to more developed fission from the Ghosi caste of which they are a sub-division. That of Kunjras is probably caused by confusion—at this or previous censuses—with the Khatiks, and of Manihars by confusion with the Churihars. The Nats who are a wandering tribe must always be expected to vary. The increase of Nau-Muslims is to be accounted for mainly by conversion. Other abnormal variations simply illustrate the process by which members of the lower castes are absorbed among the Shaikhs and the Shaikhs and members of the higher castes among the Saiyids. The Persian couplet on the subject of this process has been quoted elsewhere.

(2) *The Muhammadans.*

5. The third part of Imperial Table XIII shows the principal castes among which Aryas are found. As is well known, the Aryas are recruited mainly from the high castes—Rajput, Jat, Brahman and Vaish. Chamar members of the *samaj* have, however, increased from 1,500 to 6,000, and of the 4,000 Aryas found in Kumaun a great majority certainly belong to the depressed classes. Of the 8,200 Aryas who appear under "Others," a considerable number, including all found in Kumaun, returned no caste at all. But it is clear that the bulk of the community is not yet prepared to sever itself from the caste system.

The caste of Aryas.

6. More than half the Jains are Agarwals, and more than half the Sikhs are Jats. Otherwise caste is of no interest in connection with the minor religions. Of non-Indian races, European British subjects have decreased from 33,000 to 24,000—a number which doubtless includes many Anglo-Indians. The decrease is due partly to movements of the garrison, partly to the growing Indianisation of the services. In tabulation no distinction has been made between English, Scots, and Irish. If made, it would have produced unexpected results. Unless the word "English" has been loosely and presumptuously used, the Scots do not outnumber the English by ten to one, but the English outnumber the Scots by about eleven to two: and it is no longer correct to speak of the headquarters of Government as Greater Aberdeen. Anglo-Indians have increased from eight to nine thousand, but these figures for obvious reasons are not reliable. Europeans other than British subjects are slightly more numerous, and Armenians slightly less numerous than before.

The caste or race of members of the minor religions.

The local distribution of Europeans is not shown. It is of course most uneven. They form an appreciable part of the population in Lucknow, Cawnpore

Allahabad, Dehra Dun and, for part of the year, in Naini Tal : and may be said to amount to a community in the other garrison towns—Meerut, Muttra, Agra, Bareilly, Jhansi, Benares, Almora and Fyzabad. For various reasons they number a few hundreds in Saharanpur, Aligarh, Moradabad, Farrukhabad and Shahjahanpur. They are wholly negligible in every other district, some of which have not more than one or two, and none probably have as many as twenty.

Subsidiary table I.—*Variation in caste, tribe, etc., since 1881.*

General occupation.	Caste, tribe or race	Persons, (000's omitted)			Percentage of variation, increase (+), decrease (-).		Percentage of not variation 1881-1921.
		1921.	1911.	1901.	1911 to 1921.	1901 to 1911.	
1	2	3	4	5	6	7	8
Hindus							
Landowners	Bhainhar ..	188	134	206	+40.0	-35.0	+0
	Rajput ..	3,207	3,429	3,525	-4.7	-2.7	+3.6
	Sainthvar ..	123	119	..	+3.6	..	..
	Taga ..	95	103	109	-8.1	-5.5	-0.3
Cultivators	Bhar ..	420	393	381	+6.8	+3.1	+10.4
	Bhoksa ..	8	..	..	+14.8	..	..
	Jat ..	688	710	787	-3.1	-9.8	+2.1
	Kachhi ..	679	728	714	-6.8	+2.0	-3.8 (1891)
	Kisan ..	321	353	375	-9.3	-5.9	-13.1 (1891)
	Koori ..	445	444	505	+0.4	-12.1	-17.5 (1891)
	Kurmi ..	1,748	1,887	1,998	-7.4	-5.6	-14.1 (1891)
	Lodha ..	1,044	1,111	1,097	-6.1	+1.3	+0.3
	Murao ..	613	674	669	-9.0	+2.3	-9.6 (1891)
	Saini ..	58	66	74	-12.3	-10.8	-41.4 (1891)
Market gardeners	Tharu ..	29	..	..	+4.4	..	..
	Baghban ..	134	135	..	-1.2	..	..
	Barai ..	142	139	138	+2.2	+7	-7.1 (1891)
Labourers	Mali ..	183	181	289	+2.3	-37.4	-28.0 (1891)
	Chamar ..	5,836	6,076	5,942	-3.9	+2.4	+7.3
	Dhanuk ..	123	129	127	-5.1	+1.6	+3.1
	Duadhi ..	73	..	..	+3.5	..	..
	Kori ..	799	860	995	-7.1	-13.6	-5.2
	Luniya ..	424	409	400	+3.6	+2.2	+11.8
Graziers	Pasi ..	1,338	1,311	1,210	+2.1	+5.7	+29.4
	Ahar ..	420	283	246	+50.3	+15.0	+53.8
	Ahir ..	3,691	3,884	3,847	-5.0	+1.2	+3.0
	Gadariya ..	939	984	948	-4.4	+3.6	+8.3
	Gujar ..	269	292	285	8.0	+2.5	-0.6
Traders	Agarwal ..	304	..	..	+18.0	..	..
	Agrahari ..	79	..	..	+2.3	..	..
	Kalwar ..	269	286	324	-5.9	-11.7	-32.3
	Khatik ..	177	182	199	-2.5	+8.5	+16.6
	Sonar ..	253	262	287	-3.5	-8.7	+0.8
Confectioners	Bharbhunja ..	269	290	314	-7.4	-7.6	-11.8
	Halwai ..	54	57	68	-4.9	-16.2	-17.5
	Tamboli ..	63	68	80	-6.9	-1.5	-14.0 (1891)
Artizans and Craftsmen.	Barhai ..	462	503	551	-8.1	-8.7	-7.6
	Darzi ..	74	82	103	-9.2	-20.4	-16.4
	Dhunia ..	23	28	20	-17.5	+40.0	-88.8
	Depressed (hills) ..	280	329	282	-5.1	+16.7	..
	Kumhar ..	700	715	711	-2.2	+6	+9.5
	Lohar ..	487	502	533	-3.0	-5.8	-2.0
	Teli ..	713	734	735	-2.9	..	+6.9
Collectors of jungle produce.	Thathera ..	17	..	..	-13.4	..	..
	Kol ..	69	..	..	+1.3	..	..
The professions	Brahman ..	4,487	4,660	4,806	-3.7	-3.0	-4.8
	Kayasth ..	453	471	522	-4.0	-9.8	-12.9
Menials	Bhangi ..	359	398	370	-12.2	+7.6	-8.5
	Dom (plains) ..	14	..	..	-53.3	..	..
Devotees and genealogists.	Faqir ..	105	144	299	-27.0	-51.5	-53.2
	Goshain ..	111	94	..	+17.9	..	-7.8
	Bhat ..	71	116	132	-39.2	-12.1	-45.7
Gipsies	Habura ..	1	..	..	-17.0	..	..
	Nat ..	41	..	..	-4.8	..	..
Muhammadans							
Landowners	Rajput ..	161	194	406	-16.9	-51.2	-57.6
Cultivators	Meo ..	50	62	58	-20.6	+6.9	-26.0
	Turk ..	71	..	..	-7.7	..	..

Subsidiary table I.—*Variation in caste, tribe, etc., since 1881—(concluded).*

General occupation	Caste, tribe or race.	Persons, (000's omitted).			Percentage of variation, increase (+), decrease (—).		Percentage of net variation 1881—1921
		1921	1911.	1901.	1911 to 1921.	1901 to 1911.	
1	2	3	4	5	6	7	8
Muhammadans —(concluded)							
Graziers ..	Gaddi ..	61	55	59	+10·8	—6·8	+15·7
	Gujar ..	69	72	78	—4·9	—7·7	+6·2
Personal and domestic servants.	Bhisti ..	78	98	85	—20·8	+15·8	—6·2
	Dhobi ..	98	102	97	—4·1	+5·2	+15·3
	Nai ..	227	237	227	—4·4	+4·4	+12·9
Traders ..	Kunjia ..	80	72	86	+9·3	—16·3	—7·4
	Qassab ..	152	172	184	—11·5	—6·5	+0
Artizans and Crafts men	Bairhai ..	88	95	81	—8·3	+17·4	+32·9
	Darzi ..	154	170	163	9·7	+4·8	+3·4
	Dhunia ..	330	376	362	—12·3	+8·9	—19·0
	Julaha ..	882	953	923	7·5	+3·3	—2·2
	Lohar ..	82	95	81	5·0	+14·3	—4·6
	Manihar..	90	75	74	+18·6	+1·4	+31·6
	Teli ..	225	233	215	—3·8	+8·4	+11·2
The professions ..	Mughal ..	59	60	84	—2·5	—40·0	—25·5
	Sayid ..	279	250	263	+11·7	—6·7	+12·2
Wenia's..	Bhangi ..	16	20	91	—18·1	—78·0	—4·0
Devotees ..	Faqr ..	339	383	347	—11·5	+10·1	—3·5
Gipsies ..	Nat ..	31	..	..	+22·5	..	..
Not differentiated	Namushim ..	56	..	..	+58·0	..	..
	Pathan ..	911	960	8·6	—5·2	+17·6	+21·6
	Shaukh ..	1 428	1,315	1,365	+9·4	—3·7	+5·9
—Aryas (000's not omitted)							
	Brahman ..	25,668	17,970	10,887	+4·8	+65·1	+409·0
	Chamar ..	6,398	..	..	+312·6	..	..
	Jat ..	29,378	9,765	4,367	+201·0	+123·6	+3,957·7
	Rajput ..	59,927	32,659	17,673	+23·2	+64·8	+976·2
	Varish ..	22,228	21,563	13,546	+3·1	+59·2	+286·8
Minor Religions (000's not omitted)							
Jain ..	Brahman ..	189	111	..	+70·2	..	+490·8
	Rajput ..	335	688	..	—51·3	..	—24·0
	Vish ..	68,025	74,137	..	—15·0	..	—25·2
Sikh ..	Banjara ..	471	678	..	—30·8	..	+50·8
	Barhai ..	139	..	..	—67·1	..	..
	Brahman ..	237	115	..	+106·0	..	+104·4
	Jat ..	8,020	7,000	..	+14·6	..	+32·4
	Khatti ..	174	1,004	..	—82·6	..	—73·5
	Rajput ..	882	1,385	..	—37·7	..	—2·0
	Varish ..	2,013	242	..	+732·0	..	+2,136·0

Chapter XII—OCCUPATION.

The statistics of occupation will be found in Imperial Tables XVII to XXI. Table XVII classifies the population generally by occupation. Tables XVIII and XIX deal with mixed occupations. Table XX correlates occupation with religion, and Table XXI with caste or race.

The Statistics of Occupation where exhibited.

Table XXII gives certain industrial statistics.

The numerous subsidiary tables at the end of this chapter reproduce these statistics in a form more easily intelligible.

2. The statistics (except those of Table XXII) are derived from the entries made in three columns (nos. 9, 10 and 11) of the census schedule. Of these the first was for the principal occupation of workers: the second for the subsidiary occupation of workers: and the third for the occupation by which dependents are supported (i.e. the principal occupation of the supporting worker). Now there are many difficulties involved in the filling up of these columns, and in order to form some idea of the accuracy of the returns it is necessary to explain briefly what these were, what steps were taken to surmount them, and how far these steps were successful.

The questionnaire from which the statistics are derived; and difficulties of the enumerators in dealing with it.

In the first place it is difficult to make an enumerator understand the distinction between a worker and a dependent. It is intended that "workers" shall include "earners." The word "worker" (*kām karnewālā*) is not readily understood to include "earner": for one constantly sees persons who do an amount of work that would never be noticed, and yet earn a great deal. On the other hand if the word "earner" were used instead of "worker," it would not readily be understood to include persons who increase the family income by their work, and yet earn nothing directly: for instance the wife who takes her turn at serving customers in her husband's shop. Again, there is no Hindustani word which exactly renders "dependents." The word used in 1911 was *muta'aliqin*. There are several objections to this term: it is highflown and therefore unfamiliar to ordinary people: it has a technical sense in connection with famine administration: and it does not mean "dependents."

In drafting the schedule headings an attempt was made to surmount this set of difficulties by adding in brackets, after the word "workers" (*kām karnewālā*), the words "i.e. earners" (*yāni kāmānewāle*) and by translating "dependents" by the word *na kāmānewāle* ("non-earners"). This solution, aided by much verbal instruction, served its purpose. A better solution may be possible: but none of the many I consulted were able to suggest one.

A second difficulty was the distinction between the "principal" and "subsidiary" occupation. The instructions given on this point differed slightly from those given at last Census. The rule, both in 1911 and in 1921, was that the "principal" occupation is the most lucrative. But in 1911 an exception was made: where one of two occupations took up the greater part of the worker's time, this was to be the principal occupation although it might not be the most lucrative. A little analysis will show that the so-called exception cannot be a true exception at all, but must be the governing rule. And as besides being illogical it is also confusing, it was omitted in 1921. It is evident that the omission has made little or no difference to the returns. The stock instance (and the most common) in which the exception would operate is that of the soldier or official with private means. Yet the category "persons living on their income" is proportionately and absolutely much smaller now than ten years ago.

The third difficulty was that of impressing on the enumerating staff the necessity of a fully descriptive entry. This difficulty is enhanced by the practice of the courts, with which every one concerned is familiar. A magistrate takes down a man's name with particulars like this—"Ram Singh, son of Ranjit Singh, caste Rajput, occupation service"—or "Bishn Das, son of Ishwari Das, caste Vaish,

occupation shopkeeping." The enumerator is not easily persuaded that the Census wants to know the nature of the service, or the class of goods sold in the shop.

These are the difficulties. With the experience of his predecessors to guide him a Census Superintendent is now aware of them in advance, and in training his staff is able to, and in fact does, concentrate upon them. That they were, humanly speaking, successfully surmounted I have no doubt, and the fact can be proved in one respect. The category of "Insufficiently Described Occupations" contained, in 1901, 3,268,000 persons: in 1911, 1,661,000 persons: and in 1921, 941,000 persons. Of the total last given, 848,000 are labourers. And labourers whose labour is of so general a character as to be incapable of exact description can hardly be much less numerous than this.

*The Bertillon
scheme of clas-
sification.*

3. So much for the raw material of the statistics. The scheme of classification adopted to deal with it was, as in 1911, that invented by M. Jacques Bertillon and modified to suit Indian conditions. This scheme as modified divides the population occupationally into 4 classes, 12 sub-classes, 56 orders and 191 groups. It is severely logical, as Mr. Blunt pointed out in the last report.* And when one is told that out of every 10,000 head of population in this province, 7,680 (sub-class (i)) are employed in obtaining raw materials from the surface of the earth, and 2 (ii) in obtaining raw materials from beneath the earth: 1,097 (iii) are employed in converting these materials into commodities: 87 (iv) in carrying these commodities to the places where they are wanted: 443 (v) in distributing them to consumers: 55 (vi) in protecting and 53 (vii) in administering the economic processes hitherto described: while outside this materialistic system, 105 (viii) are employed in the professions and liberal arts, 9 (ix) live on their income, 179 (x) are domestic servants, 87 (xii) are parasites on the community and 202 (xi) are not described sufficiently to be placed in any of the foregoing categories, one feels that one has been told something of much interest, and that he must be an ingenious man who has been left out of the list. But the scheme of classification seems to me to have very little useful application to the present conditions of this province. It obscures exactly what we want to know. The province is still in full possession of an indigenous occupational system of great antiquity. It is coquetting with an entirely different system derived from the West. What the Census on its occupational side should be able to tell us is how far, if at all, the old system has been shaken, and the new system is taking permanent root. The Bertillon scheme makes it almost impossible to obtain any light on this question.

Again, the most useful statistics that under present conditions the Census could provide are those of labour. Labour is everywhere inadequate, and it would be of value to know what the available supply is, and in what directions it is contracting or expanding. The Bertillon scheme clearly differentiates agricultural labour, and the sub-class "Insufficiently Described Occupations" fortunately includes a heading for general labour. But all other labour is almost inextricably concealed under headings such as "Industry," "Trade" and "Transport," which lump together the managing director of a company and the woman who carries a basket of mud from a borrowpit to an embankment. In short, people are distinguished in respect of their occupation not according to the nature of the work they do, but according to the economic process which their work subserves. No scheme of classification can take account of all lines of distinction. But the defect of the Bertillon scheme is that it has a material not a human basis: and a human basis would have been better adapted to our requirements.

*The accuracy
of the
statistics.*

4. It has been seen that the raw material for the occupational statistics provided by the schedules was sound, and that the scheme of classification prescribed for its exhibition was at least elegant. It remains to estimate how far the classification was accurately done. Except in one Central Office it was done well enough. In the Fyzabad Office—which dealt with the Fyzabad Division, the districts of Mirzapur and Jaunpur, and the Benares State—it was done exceedingly badly. The Deputy Superintendent here had an unfortunate ambition to finish first, and this classification was the last job to be done: and his office was closed down before the defectiveness of this part of its work had become apparent. The fault was mainly one of incompleteness: there were not sufficient occupations to cover the population of any district. The incompleteness was

* Which should be referred to for a detailed account of the scheme, pages 332—334.

made good in the Head Office, with an accuracy that was certainly approximate, on such data as were available. But some obvious defects could not be remedied and will be observed in the tables: for instance no quarrymen are shown for Mirzapur, and no soldiers for Fyzabad.

The accuracy of the statistics can be gauged from what has been said above. It should be remembered that they are an analysis of the state of affairs found on a single day. Nevertheless they represent the normal functional distribution of the people except to a trifling degree. Owing to the day selected being at the commencement of harvest operations, agricultural labourers probably gain unduly at the expense of labourers of other kinds. Certain hot weather occupations—such as that of the pankha cooly—can hardly appear at all. But in the aggregate such deviations from the normal will amount to very little.

5. Except in one respect, which will be dealt with at once, the functional distribution of the population is, largely speaking, precisely what it was ten years ago. It was discussed in the last report in a very long chapter, and it would be superfluous to go over the ground again. I propose only to examine such appreciable variations as there are, and to consider how far these are merely accidental, how far they point to the existence of definite occupational tendencies.

The general functional distribution of the population.

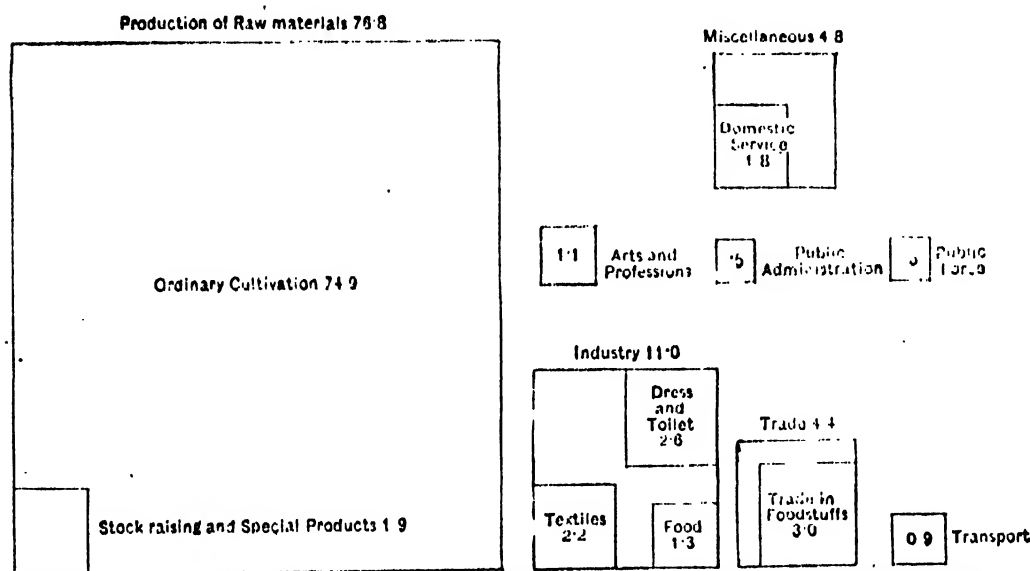


DIAGRAM SHOWING THE DISTRIBUTION PER CENT OF THE POPULATION IN VARIOUS OCCUPATIONS

The distribution which is here shown graphically by a diagram is best seen in Subsidiary Table J, further illustrated by Subsidiary Table VII. Three-quarters (749 per 1,000) of the population are engaged in ordinary cultivation. The cultivation of special products, forestry and pasture bring the "farming" figure up to 768. These proportions are much higher than in 1911, when the figures per 1,000 were respectively 715 and 733. In spite of the decrease of population, the absolute numbers are also greater. In thousands ordinary cultivators numbered 31,615 in 1901; 34,327 in 1911; and 34,834 in 1921. There is no indication here (it has already been argued that there is no indication in the other census statistics) that the land has reached the limit of what it can support. The gain is entirely at the expense of Labour and Industry. Agricultural labour has decreased (in thousands) from 4,552 to 4,036; unspecified labour from 1,604 to 848; industry (which includes a lot of labour) from 5,834 to 5,100 and from 122 to 109 per 1,000 of the population.

Two tendencies might be thought to be indicated by these figures. As to one of these there can be no doubt. During the decade there has been, notoriously, an enormous demand for labour. This has not had the effect of attracting the people away from the land, but paradoxically enough has produced the opposite result. The supply of labour—also notoriously, and as is revealed by the statistics—has not expanded in response to the demand. No wages will attract the peasant of the province from his holding so long as his holding will maintain him in the standard of comfort to which he is accustomed. With grain at the prices prevalent since 1914 his holding will do this and more. Consequently the existing

and unexpanding labour force has been able to use the competition for its services to exact its own terms. And the labourer takes advantage of his improved financial condition to convert himself into a small holder whenever an opportunity offers : thereby making it easier for the rest to do likewise.

The second tendency that might be deduced from the statistics quoted is a movement of the industrialist back to the land. Unfortunately the Bertillon scheme of classification makes it impossible to decide whether such a tendency is in operation or not. For "Industry" in the Bertillon classification covers industry carried on under two wholly different systems. There is the indigenous system—still hardly shaken by the attack of Western methods—under which each small community is self-contained, and the village needs are supplied by the village artisans : the plough by the village carpenter and the earthenware vessels by the village potter. There is also the European system, which a special department of Government has been created to foster, whereby each particular requirement of the community is distributed from some manufacturing centre. The population shown in the Bertillon classification as occupied in industry is employed under both these systems. Of the 110 persons (per 1,000 of population) shown as industrialists—to take the principal orders—22 engaged in textiles are partly operatives in the spinning mills, partly village weavers : of the 4 dealing with hides, some are working in the tanneries, some are the village Chamars : the 8 shown under "wood," the 6 under "metals," and the 7 under "ceramics" are very largely, but by no means wholly, the village Barhais, Lohars, and Kumhars respectively. A large but unknown proportion of the 26 shown under "Industries of Dress and the Toilet" are the village Darzis and Barbers. It is impossible to say whether the loss of industry reflects a movement of industrialists in the modern sense "back to the land," or the drifting to cultivation of a surplus—created possibly by the competition of western methods of manufacture—among the village artisans.

It is certain, however, that the population has not yet begun to respond to the efforts made to attract it from agriculture to industry.

Shown below are the proportions per 1,000 of the remaining sub-classes (excluding Agriculture and Industry) found at the present Census and at the last :—

	1911	1921
Exploitation of Minerals	2	2
Transport	9	9
Trade	45	44
Public Force	7	5
Public Administration	6	5
Professions and Liberal Arts	11	11
Persons living on their Income	2	1
Domestic Service	20	18
Insufficiently Described	36	20
Unproductive	11	9

Except "Insufficiently Described"—the great bulk of whom belong to Industry and Labour, for these are the pursuits which, as a matter of experience, are found to be insufficiently described—these categories are all practically unchanged, and if shown as a percentage would in all cases appear to be so. It will be seen that the occupational distribution of the population is slightly more economical than in 1911. The province is governed and protected by slightly fewer men than before : there are slightly fewer middlemen : and persons living on their income, domestic servants, and persons engaged in unproductive pursuits are also less numerous.

Agriculture.

6. I will now deal separately with each of the principal occupations.

It has already been noticed that the number supported by agriculture has greatly increased, both proportionately and absolutely. The increase is entirely confined to "ordinary cultivators," who are more numerous by over a million. The number of those supported by agricultural rents has decreased rather more than in proportion to the decrease of population : that of agricultural labourers has decreased much more than this. The figures are given in the margin.

Occupation	Population supported in 1911.	Population supported in 1921.
Income from agricultural rents.	866,419	818,487
Ordinary cultivators	28,712,015	29,848,163
Agricultural labour	4,552,043	4,035,887

Although the entries of agricultural occupation prescribed to be made in the schedules were wholly different from those prescribed in 1911, the variations cannot be due to this fact. In 1911 persons in possession of agricultural land were divided for enumeration purposes into three classes—landlords, occupancy tenants, and non-occupancy tenants: and these were further sub-divided into two sub-classes, those who let and those who cultivated their land. At the present Census there were two classes only: *kasht* was entered for those who, whether landlords or tenants, derived their income or the greater part of it from cultivation, either by themselves or through their servants: and *lāgan* was entered for those who, whether landlords, tenants, or even sub-tenants, derived their income from rents. This simplified system was adopted for two reasons: firstly, it gave, just as much as the system of 1911, all the information necessary for the preparation of the Tables as prescribed; secondly, in the rather delicate conditions prevailing in 1921 it was inadvisable to make things too difficult for the enumerator.

It is evident that whichever of these two systems is used in enumeration, the classification of the returns under the two heads "Rent Receivers" and "Cultivators" should give the same results.

To what then is the variation in the figures due? To some extent to the rise in wages, but mainly, I think, to the rise in the prices of grain: and also to the absence of a corresponding rise in rents. The rise in wages has operated, as has already been said, not to swell the ranks but merely to fill the pockets of labour. And the labourer who acquires a little capital invests it in obtaining a holding. The increase in the number of "ordinary cultivators" is largely at the expense of labour, both agricultural and other.

The rise in prices of grain must undoubtedly have operated to attract men to agriculture from other occupations. And as rents do not rise at the same pace—or at anything like the same pace—as prices, it has attracted them to the cultivating and not to the rent receiving side of the business. I expected to find a large part of the variation due to this cause to be only an apparent variation. The bulk of agriculturists combine agriculture with some other pursuit. They are counted as agriculturists (in the figures with which we are now dealing) only where agriculture is their sole or principal occupation. The effect of a rise in the price of grain would naturally be expected to be to convert, in a large number of cases, what was a subsidiary agricultural occupation in 1911 into a principal agricultural occupation in 1921. The statistics however show that the variation cannot be accounted for in this way. Out of every 1,000 actual workers, at the last census 518 combined agriculture (excluding agricultural labour) as a principal occupation with other occupations. Only 482 do so now.¹

Allusion has been made to three influences which have combined to affect the statistics of agricultural occupation—a rise in prices, a rise in wages, and a failure of rents to rise in proportion to prices and wages. It is safe to conclude that the resultant of these influences has been not only to attract people to agriculture from non-agricultural pursuits, but also within the agricultural occupations to attract them from landlordism and labour to cultivation. Some further evidence (besides that of the figures quoted at the commencement of this paragraph) of this latter process is provided by Subsidiary Table V. Out of every 1,000 workers, 185 landlords and 37 labourers in 1911, and 218 landlords and 16 labourers in 1921, were also cultivators.

Table V also corroborates what has been said as to the effect of high wages on labour. Although labourers are far less numerous than they were ten years ago, and although high wages might be expected to keep them exclusively to the land, 194 per thousand of them have now taken up subsidiary occupations. Only 62 had done so in 1911.

On account of its importance the occupation "Raising of Farm Stock" deserves brief notice. The proportion of the population engaged therein is practically unchanged (162 per 10,000 in 1911, 169 in 1921). Considering that the basis of the prosperity of the province is cattle—which are the sole capital of the great bulk of its inhabitants—this proportion might seem surprisingly small. Every 8 or 9 acres of agricultural land require a pair of bullocks, and to breed these (and not to provide milk, as is popularly believed) countless cows are kept all over the country. To provide milk, which with its products is an important item in the

Pasture.

¹ See Subsidiary Tables IV and V.

provincial diet, buffaloes are bred in smaller but still enormous numbers. Practically every cultivating family has at least a pair of bullocks. Except in certain forest tracts however these animals are not seriously grazed. They are stall-fed on the bye-products of the crops, and the care of the herd is the common concern of the family. These facts explain why an increase of cultivation is possible at all. At the beginning of the decade there was an outcry—in which Government joined—that the grazing grounds of the province had become inadequate, and it was suggested that villages should be encouraged to set aside a part of their lands for pasture. Nothing came of the suggestion; yet more cattle must have been raised to enable cultivation to increase. The truth is that (except in the few tracts where fencing and therefore hay-making is possible) an acre of village land under crops produces—as a bye-product—more cattle food than an acre under pasture, which latter is completely bald at the time when grass is needed.

Industry.

7. The number per thousand of the population employed in Industry has decreased from 121 to 110; the absolute figures (in thousands) were 6,241 in 1901, 5,834 in 1911, and 5,100 in 1921. As has already been said, what is Industry's loss must be Agriculture's gain. And as has also been pointed out, the evidence is against the natural supposition that the loss is unreal and due merely to the increase in prices of grain converting a subsidiary into a principal agricultural occupation.

An examination of Subsidiary Table VII will show that the decrease is general and spread over all industries except two. Makers of leather articles have increased in number from 5,000 to 109,000, and of boots from 166,000 to 174,000. This is due to the impetus given to the leather trade by the war, and maintained by a general rise in the standard of living. One may see ten men wearing boots now, where he saw one ten years ago. This is a development of modern rather than of indigenous industry. So is the other case of increase—"production of physical forces": but this enterprise at present is on a very small scale. Apart from these two, the only industry that has declined less than in proportion to the population is that of the manufacture of iron tools. The comparative prosperity of this craft is presumably owing to the increased demand for agricultural implements due to the expansion of agriculture.

So far as I am aware no new industry has been established during the decade. At the end of the war period, when foreign liquor was expensive and hard to obtain, a spirit called Cawnpore Whiskey appeared on the market for a short time. Where and of what this was made I do not know. But a former friend on whom I tried it asserted (as soon as he was able to speak) that it was the bye-product of a tannery: presently concluding his remarks with a rider, that it is better to live a teetotaller than to perish blasphemously.

The principal industry of the province is Textiles: which employs 12 per cent. fewer persons than in 1911. Nor does it appear that more persons than before follow this industry as their subsidiary occupation. Of cultivators 18 per 10,000 are secondarily weavers, and of agricultural labourers 11. The corresponding figures in 1911 were 24 and 5. The minor wood industries have declined by 20 per cent., metals by 5 per cent., ceramics by 11 per cent., chemical products by 7 per cent., food industries by 45 per cent.: industries of dress and the toilet—a very diverse assortment—by 10: builders by 31, bricklayers by 18, and miscellaneous by 21.

It has already been observed that the Bertillon classification furnishes practically no hint as to the nature of this decrease. There being two wholly different industrial systems in operation in the province, it may reflect one of two things: either a movement "back to the land" of the mill and factory population, which would point to the failure of modern methods, or the lapse to agriculture of a surplus among village artisans, which could only be due to the competition of the mill and factory and would point to the success of modern methods.

The Special Industrial Census.

It is possible however to attempt to give some answer to the question here outlined by examining the statistics reproduced in Imperial Table XXII and in the "Industrial" Subsidiary Tables. These statistics have been extracted from the special industrial schedules, by means of which particulars were obtained of the personnel employed in all industrial concerns employing 10 or more persons. Similar statistics were collected in 1911, but only in respect of concerns employing 20 or more persons.

I confess that I have very little confidence in these statistics. In the first place, even if the enumeration was accurate, they represent only the facts of a particular day; and that day, which had to be at about the same time as the census proper, but after it (to avoid interference with work that was more important) necessarily fell in the middle of the harvest. A very large proportion of the unskilled labour ordinarily employed in industrial concerns was drawn away for harvesting, and the time was one at which textile industries would in any case be slack.

In the second place, the enumeration was taken by a staff which was untrained in census work, and which took no interest whatever in the business.

I fancy therefore that the figures at any rate of unskilled labour are very far from representing normal conditions. But they are good enough to compare with those of 1911; and a comparison shows that persons engaged in organized industrial concerns with more than 20 employes (for purposes of comparison I omit those with less than 20 employes) have increased during the decade from 58,330 to 72,917.

The statistics therefore suffice to show that it is industry of the indigenous not of the westernized type that has lost personnel. They are not sufficiently reliable to enable the losses of the former to be gauged accurately.*

If concerns employing between 10 and 20 persons be included, the returns show 83,000 persons (of whom 42,000 are unskilled) as employed in organized industry. The true figure may perhaps be 100,000. The capitalized cost of the staff alone of the Department of Industries is about Rs. 25,00,000. So that each of these hundred thousand persons may feel that something over Rs. 25 is being paid by Government to further his industrial interest. He clearly has a rosy future.

8. A considerable mass of information with regard to the industries of the province was collected for me by District Census Officers and others. I intended originally to deal fully with this information in the report: but since its collection the Director of Industries has inaugurated an industrial survey, which is being made by a staff, doubtless highly qualified, consisting of a Deputy Director and ten Divisional Superintendents, one for each Revenue Division. This staff has been in existence for more than a year, during six months of which it was in possession of my notes; and as I know that one Superintendent, in a division in which there are practically no industries worth the name, is still functioning, the survey is evidently going to be a very thorough one. It is therefore superfluous for me to deal as a layman with a subject which is about to be taken up exhaustively by experts. This causes me no regret: but I feel I owe an apology to the many Deputy Collectors and others who collected for me material which I am not going to use. I can only comfort them by saying that they will doubtless, in due course, see the results of their labours reproduced in another place.

The nature of the industries of the province.

It may be worth while to summarize briefly the general conclusion arrived at as the result of my enquiries. The industries of the province are mainly of three types:—

- (1) Large scale enterprises on the western factory system, using modern machinery and aiming at distribution of their products to distant markets.

These are practically the only concerns that recruit labour other than local. They deal principally with flour, cotton, wool and leather.

- (2) The industries of the village artisans, who use primitive methods and aim at no more than meeting village requirements. The labour employed is usually that of the family only.

These provide agricultural implements, pottery, shoes and other simple local needs.

- (3) Certain cottage industries, carried on largely by agriculturists (and their families) in their spare time and ordinarily organized by a small local financier who advances money or material and buys and distributes the finished product.

These industries deal with an immense range of commodities—some in general demand, such as handspun cloth, brassware, and carpets:

* In 1911 there were in the province (including states) 866 "industrial concerns" employing over 20 persons, of which 176 used mechanical power. There are now 708 such concerns, of which 196 use mechanical power. These figures are reasonably accurate, and give a fair idea of the extent of the advance made by modern industry during the decade.

out largely petty and rather useless luxuries, such as perfumes, ornamental whips, and shell buttons. The markets which these products reach depend on the capital and enterprise of the financier.

Of these three types, the factory organized on modern lines has hitherto been reasonably successful: but its success is limited in one and that a vital respect—by the difficulty of obtaining and retaining labour. This limitation stands also in the way of the development and extension of industry on these lines.

Of enterprises of modern type a few are to be found in certain of the larger towns and cities, and one or two in rural tracts: but they are mostly concentrated in Cawnpore and Agra. The nature of the labour force in Cawnpore has been analysed in Chapter III. Attempts made—by the provision of housing and other facilities—to create a permanent industrial population have met with very partial success. The great bulk of the operatives have to be recruited from the labouring population elsewhere. Recruits can be obtained readily only where there is a surplus, and nowhere—as the figures of occupation show—is there a surplus. An unwillingness to be severed permanently from the land is deeply embedded in the character of the people. Workmen can be got in adequate numbers at slack but not at busy agricultural seasons. And seasonal workmen do not meet modern requirements: machinery which lies idle for a considerable part of the year can seldom be remunerative.

These are the conditions which stand in the way of factory enterprise so long as it is concentrated in large centres: and they appear to be insuperable. As has been shown in Chapter III, labour in this province is not mobile. It appears that the future of modern industry lies in the isolated factory, preferably located near the source of its raw material, which is not too big to be satisfied by local labour. There are a few such factories in existence—for instance the sugar factories in the cane tracts of the Gorakhpur district.

Industry of the second type is as old as time, and its organization is of the simplest possible character. There are indications to be found in the statistics, as has been shown, which suggest that it is feeling the competition of industry of the first and third types, with the result that a certain surplus of the village artizan population is drifting into agriculture. The village potter must have accommodated himself long ago to the effects of the introduction of metal utensils. The village blacksmith and carpenter have been more recently attacked, for instance by the growing popularity of the factory-made sugarpress and pickaxe. The rural artizan would be hit still more hardly if methods of commercial distribution were more efficient. This latter point will be noticed under the heading of "Trade."

Industry of the third type is clearly what is best suited to the conditions and genius of the country, especially of those parts of the country where agriculture is precarious. The bulk of the population is agricultural, and agriculture here means ordinarily the growing, harvesting and disposal of two crops in the year, and not the mixed farming familiar in England. Agriculture of this kind involves very hard work for certain short periods—generally two sowings, two harvests, an occasional weeding in the rains, and three waterings in the cold weather—and almost complete inactivity for the rest of the year. In precarious tracts inactivity may be unavoidable for a whole season, or even for a whole year. These periods of inactivity are, in the great majority of cases, spent in idleness. Where the cultivator pursues some craft which will employ himself and his family at times when they are not required in the fields—a craft in which continuity of employment is not essential—the proceeds of that craft are a saving from waste, and therefore clear gain. The most typical of such crafts, which political controversy has made familiar, and the one which is most widely pursued, is the production of homespun cloth. Others have already been alluded to. Weaving as a cottage industry, for all the impetus supplied by a political movement, appears to be on the decline: it has failed to advance partly perhaps because the "*Gandhi charkha*" on whose use the movement insists, produces a yarn which—so I am credibly informed—owing to its unevenness is almost unusable. But however adapted cottage industries may be to local conditions, the cottage craftsman has no capital and no business capacity. These things must be supplied from outside: and where the industry is flourishing they are so supplied.

In the last report¹ will be found a description of the brassware industry of Benares. The industry of this type that has appeared to me to be carried on under the most ideal conditions is the carpet industry of Mirzapur. Here the management finances the purchase of the materials, controls the designs, and markets the product. The craftsman takes the work to his home and does it with the help of his family in his own time. An extension of this or similar industries into the precarious tracts of South Mirzapur, South Allahabad and Bundelkhand would go far to protect that region from famine, besides improving its economic condition in normal times.

9. The number of persons per 10,000 occupied in Transport has fallen from 94 to 87, and the absolute figures from 449,610 to 402,376. In the arrangement shown in Subsidiary Table I there is a proportional increase under "Transport by rail" and a decrease under "Transport by water" and "Transport by road." "Transport by water" includes the running of the canals, and is to this extent a slightly misleading phrase: but persons employed in this form of irrigation are rightly classed as transporters, for they are engaged in carrying a commodity (water) to the place where it is wanted. The figures reflect generally what would be expected, the increase of mechanical vehicles having reduced (proportionately to the population, not absolutely) the personnel employed in transport on the roads. *Transport.*

The statistics are more interesting as exhibited in Subsidiary Table VII. The most antiquated form of transport, palki bearers, has decreased by over 50 per cent., as it did in the last decade, and now employs only 9,000 persons. Pack transport and boat transport have both dropped by about a third. Railwaymen have increased considerably, and persons employed in connection with road vehicles (including mechanical vehicles) have increased slightly. It is a pity that mechanical and non-mechanical vehicles have not been distinguished.

The decrease under "Construction and maintenance of roads and bridges" must be accidental and due to relatively little new work being in hand at Census time. That under Postal and Telegraph Services is of no significance. The great mass of employes in this department have other additional occupations such as agriculture, shop-keeping and school-teaching: and all occupations have appreciated enormously in profitableness relatively to employment by the State.

10. Traders bear almost the same proportion to the population as they did ten years ago, when they numbered 448 per 10,000. They now number 443. The absolute figures are 2,140,395 for 1911 and 2,060,274 for 1921. The only notable increases are among traders in textiles, groceries, fodder and means of transport. These are probably due, in the case of the first two, to a general rise in the standard of living among the agricultural population. Increased business in fodder goes with increased trade in means of transport, which consists almost entirely of dealing in animals: and the latter increase is evidently owing to the much larger number of persons who now cultivate on their own account. *Trade.*

The big decreases in some of the petty trades are, to judge from the nature of these trades, probably due to the greater lucrativeness of other occupations formerly subsidiary. Agriculturists who trade as a subsidiary occupation numbered (per 10,000), in 1911, 307 in the case of landlords and 146 in the case of cultivators. The corresponding proportions in 1921 are 307 and 84.

As observed in the last report, in the ordinary way the maker of a commodity also sells it; and the organization of rural trade is very primitive. The great bulk of the population is served commercially by small rural markets held once or twice a week, supplemented by the permanent bazars of country towns. To these markets the agricultural population brings its surplus grain for sale, and buys with the proceeds those necessities which it does not provide for itself—mainly cloth, salt and oil. In some barter still obtains. In prosperous times much money is also spent on small comforts which have not yet become necessities, and even on luxuries. It is in respect of these that the organization of trade is so rudimentary. In the ordinary way the wholesale or even the retail merchant who deals in articles other than of local origin himself journeys to the place of manufacture, and there obtains his stock. In consequence the rustic customer cannot dictate what he will buy, but has to choose from very limited and arbitrarily selected alternatives. The rural merchant has little idea of looking for new commodities. Nor have manufacturers the enterprise to

advertise their wares in new places. In one bazar is to be seen a great show of glass bottles or of fancy waistcoats: in another none of these things, but a roaring trade is done apparently in walking sticks. At the moment tawdry rubbish of the Japanese variety is in much evidence everywhere. There would seem to be room for organizations to supply to the rural community simple commodities that it cannot provide for itself, and that will be really useful to it, with business methods of distribution through local agencies. Such organizations, of which there is at present little or no sign, would probably have the effect of reducing appreciably the proportion of the population engaged in trade.

An analysis of the trade of a small town—Mau in the Jhansi district—kindly prepared for me by Mr. B. V. Bhadkamkar, I.C.S., is printed as Appendix D. The trade of Mau may be taken as typical of the trade of the province outside the larger cities.

*Public
Adminis-
tration.*

11. There is little to comment upon in the figures of Public Administration. The proportion per 10,000 of the population is practically unchanged for public administration proper: this was 56 in 1911 and is 53 now. The absolute numbers are 269,593 and 245,862 respectively. The decrease is due not to any reduction of public servants, but to the fact that state employment is relatively to other occupations much less lucrative than it was, and has become in many cases the subsidiary where it used to be the principal occupation.

The proportional figure for Public Force has fallen from 70 to 55, and the absolute numbers from 336,627 to 253,503. The decrease falls entirely under Police, and is due mainly to the cause just mentioned: but partly also to the abolition of road chaukidars. The army shows an increase in spite of the absence of some units on service. This is owing to intensive recruiting in the last year of the War. Who the 299 sailormen are I have no idea.

*Professions
and Liberal
Arts.*

12. The Professions and Liberal Arts supported 111 persons per 10,000 in 1911 and support 105 now. There is an increase under Medicine and Instruction, as one would expect. The enormous decrease of Religious Mendicants, following an enormous decrease in 1911, is hard to explain, and is probably too good to be true. Numbers of these and of Temple Servants have evidently been recorded as Priests.

What Mr. Arnold Bennett would call "Creative Artists", excluding musicians, are more numerous by 18 per cent. The increase is probably confined to journalists: who, provincial standards being what they are, should not properly be classed under the "liberal arts" at all. There is a surprisingly large decrease of Musicians, Actors and Dancers.

*Persons living
on their
Income.*

13. To account for the decrease (40 per cent.) of persons living on their income it is unnecessary to look beyond the fact that at the present cost of living pensioners can no longer subsist upon their pensions, but have to find employment of some kind.

*Domestic
Service.*

14. Domestic servants would be expected to lose numbers in hard times, and they have done so. The only very big decrease however is among Grooms; this is obviously due to the general replacement of horse-drawn by mechanical conveyances.

Unproductive.

15. A rise in the cost of living is always followed by a contraction of charity. The "unproductive" community has consequently been reduced by 29 per cent.

Labour.

16. Agricultural labour has been dealt with in its place. Other labour is closely connected with industry in one form or another, and will doubtless be dealt with by the Director of Industries in the course of his survey. It needs therefore only the briefest notice here.

A certain amount of labour is included in the figures of Industry and Transport, and some in those of Trade. The bulk of non-agricultural labour however is "unspecified": which means for the most part that it takes any manual work that offers. The number of persons supported by unspecified labour is 848,000. Add to these some 200,000 supported by organized industry, and perhaps another 300,000 who though classed under Industry should more properly be classed under Labour—chiefly masons, bricklayers and sweepers: some 50,000 supported by Transport, and another 50,000 (an outside figure) supported by Trade; the sum total, with agricultural labourers (4,036,000) added, comes to 5,484,000 or say five millions and a half, and represents the whole labouring population of the province.

A large part of this labour force is permanently attached to the land : a very small part considerably less than 100,000 actual workers—is permanently attached to certain organized industries. What remains is mostly persons ready to put their hands to any work that offers, but only in the last resort at a distance from their homes. There would probably be sufficient labour to meet the present needs of the province if enterprises requiring it were dispersed over the country, and were able to time their demands so as to avoid the busy agricultural seasons. Unfortunately neither of these conditions is fulfilled. As to the first, the tendency is all towards concentration, principally at Cawnpore, Agra and other big cities. As to the second, the busy months are March, April, July, September, October, and November : the smaller textile concerns, flour mills, sugar factories, and road and railway construction are to some extent able to avoid these months. But generally speaking every one is crying for labour at the same time, and especially in the cold weather.

The scarcity of labour is well illustrated by comparison with the statistics of England and Wales. In the latter country, labourers (actual workers)* number 74 per cent. of all workers. In this province, if it be assumed that of the five and a half million persons believed to be supported by "Labour", three million—a generous allowance—are actual workers, labourers (actual workers) number 12 per cent. of all workers. The figures for agricultural labour are still more remarkable. In England and Wales to every 1,000 farmers there are 3,620 agricultural labourers. In the United Provinces to every 1,000 cultivators there are only 133 agricultural labourers. These are the proportions for actual workers in each case.

Two obvious but important conclusions can be drawn from these figures. On the one hand, labour in this province is not entitled to, and is never likely to attain, any considerable political power. On the other hand it has, and can exercise if and when it elects to do so, enormous industrial power. Being seriously short of requirements, it is in a position to dictate to the employer : being numerically weak, it is not in a position to dictate to the State. It can therefore bring pressure to bear on the State only through the employer. In England on the contrary labour being adequate to requirements and therefore numerically strong is more powerful vis-a-vis the State than vis-a-vis the employer : and has learnt to bring pressure to bear on the employer through the State.

17. Returns were furnished by the Irrigation Department, Post Office and Telegraph Department, and the Railways, showing the number of persons employed on 18th March, 1921. These returns are reproduced in Subsidiary Table IX and call for little comment. The figures naturally do not tally with those of the Census proper : large numbers of departmental employes will have shown their departmental occupation as subsidiary.

*Special
Departmental
Returns.*

If this Table is compared with Table VII, it must be remembered that the former shows actual workers only, the latter workers and dependents.

Each department has in direct employment rather more persons than in 1911.

18. A very large proportion of the population pursues more than one occupation. In many cases however combined callings which have been so analysed for purposes of classification would ordinarily be regarded as different aspects of the same calling. For instance, the man who cultivates so much of his holding as he can, and lets the rest, or who tans leather and makes shoes out of it, would popularly—and not unreasonably—be considered to have one occupation, not two. Quite a number of people have even more than two occupations. In the course of certain other enquiries (not connected with the Census) I discovered that the Mallahs living round the Sikri jheel in the Muzaffarnagar district have four distinct sources of livelihood. Ordinarily they act as boatmen (for wages) to the continuous stream of sportsmen who come to shoot the jheel : in their spare time they catch fish for the Dehra Dun market : they also grow rice : and in the rains, when they are driven from the lake by high water, they breed mules. A census cannot cope with multiple occupations on this scale. Where a man had more than two sources of livelihood, the two most profitable were recorded and the rest were disregarded. Some small (and negligible) amount of productive activity therefore finds no place in the statistics.

*Combined
Occupations.*

* In making this calculation, I have included among labourers those workers who ordinarily belong to Trade Unions.

Certain pursuits commonly go together, such as grain-dealing and money-lending, post office work and school-mastering ; but the only really important combination is that of agriculture and something else. Subsidiary Tables IV. and V deal succinctly with this combination, and it has been touched on already. It will be seen that the cultivators who have subsidiary occupations are much fewer, and the field labourers who have subsidiary occupations are much more numerous

Year.	Number per 10,000 who have subsidiary occupations.	
	Cultivators.	Field labourers.
1911 ..	1,878	620
1921 ..	1,579	1,940

than they were in 1911. The figures are given in the margin. I have already suggested the cause of the variation. In the case of cultivators, high prices have made cultivation a more sufficing pursuit than it used to be : in the case of field labourers, high wages have provided means of escape from labour, and the first step towards such escape is to adopt a subsidiary which will shortly become a principal and finally the sole

occupation. It will be noticed in particular that the number of field labourers per 10,000 who also cultivate has increased from 374 to 663.

It has already been pointed out that the conditions governing agriculture in the province render the pursuit of an additional occupation by agriculturists, in the vast majority of cases, a pure economic gain. The most suitable additional occupation is probably weaving, as a certain school of politicians insists. Hand-weaving is a process which can be taken up and left off at any time, and at which all members of the family can assist. It requires little capital, and its product can be used by the producer or can find a ready market. For the last few years the people have been advised, with an eloquence whose

Year.	Number per 10,000 who are also weavers.	
	Cultivators.	Field labourers.
1911 ..	4	5
1921 ..	18	11

very volume might be expected to persuade, to adopt this craft *en masse*. Yet the marginal figures show that no result has so far been achieved. This is unfortunate and surprising ; perhaps the reason is that public men have forgotten to combine sound technical advice with their political propaganda. There is here another illustration of the fact that politics benefit no one but the politician.

Dependents.

19. For census purposes a dependent was taken to be a person who does nothing to increase the family income, either by earning or by saving the expense of employing a hired servant. A wife who serves customers in her husband's shop, a son who does his share of the cultivation, increases the family income in the latter way. On the other hand, it was assumed that a woman who only looks after the house does not increase income. The distinction here involved is not as arbitrary as it appears. In practice, if a man ceases to have a son to help in the fields, he either employs a servant or cultivates less. If he has no one to look after his house, he looks after it (and cooks) himself.

Dependents in the above sense number 47 per cent. of the population. If domestic duties were reckoned as work, it would be found that hardly any persons of working age are not actually workers. Fifty per cent. of the population are either under 15 or over 49 years of age.

In 1911 dependents numbered 48 per cent. The slightly lower figure now found is probably due to the influenza epidemic. The depletion of man power has made it imperative for every available person to lend a hand in the fields.

Subsidiary Table I shows the proportion of dependents in the different occupations. A proportion of about 50 per cent. may be taken to be normal. In the case of "ordinary cultivation" the proportion has dropped from 50 to 46, for reasons already suggested. The army (46) would show a much higher figure but for the fact that many soldiers have left their families at their homes outside the province. Other occupations with low proportions are those in which the work is light and can be done without difficulty by the old and young—Trade in fuel (42), Textiles (46), Chemical Products—generally oil pressing—(42), Domestic Service (43). In the case of Food Industries (39) ; corn grinding is an exercise more or less monopolised by old women ; in the case of Ceramics, the potter's clay is usually brought to him by his wife ; and in the case of Raising of Farm Stock (24), the graziers most commonly seen stand hardly higher than a buffalo's shoulder.

Certain occupations have high percentages for one of two wholly different reasons. In the case of Law (69), Brokerage, Commission and Export (68), and Public Administration (65) it is unnecessary or unseemly for the women of the family to work, while the sons are ordinarily late (for educational reasons) in commencing to be earners. In other cases more technical knowledge or physical strength is required than is usually possessed by a woman or child—Production of Physical Forces (69), Construction of Means of Transport (65), Trade in Metals (67), and Trade in Building Materials (65).

20. The occupations of females are shown in Subsidiary Table VI. There are now 515 female to every 1,000 male workers. In 1911 there were only 468. The proportion for "Ordinary Cultivators" has risen from 402 to 526; and this increase, for which a reason has been suggested in the last paragraph, accounts for all the difference. As between groups there is enormous variation (corresponding to that found in 1911), the causes of which are obvious: or where not obvious, have been explained in the course of what was said about the connected subject of dependents. Details are best seen in the table itself.

An attempt was made to obtain statistics by which could be gauged the effect on the birth rate of the employment of women in industrial concerns. Women thus employed proved to be so few that the statistics are obviously inconclusive. For what they are worth however they are summarized in the following table:—

Conditions of work.	Women over 16 and not over 36.					Women over 36 years.					Total.				
	Number of women	Number of children born.	Number of children living.	Average children born.	Average children living.	Number of women.	Number of children born.	Number of children living.	Average children born.	Average children living.	Number of women.	Number of children born.	Number of children living.	Average children born.	Average children living.
Industrial establishments (Cawnpore, Lucknow, Benares, Allahabad) ..	281	860	421	3.0	1.5	224	1,400	473	6.3	2.1	505	2,260	894	4.5	1.8
Dehra Dun Tea Gardens (labour recruited from Partabgarh and neighbouring districts) ..	362	923	564	2.5	1.6	181	876	439	4.8	2.4	543	1,799	1,003	3.3	1.8
Partabgarh, Rural Conditions ..	862	1,086	708	3.0	1.9	181	901	535	4.3	2.9	543	1,987	1,243	3.6	2.3

21. Subsidiary Tables II, III and IV summarize in different ways the local distribution of occupations. A few salient points only will be noticed here. Excluding the Himalayas from consideration, agriculture predominates increasingly from west to east: 68 per cent. of the population being supported thereby in the Western Plain, and 90 per cent. in Sub-Himalaya East. All Divisions are markedly more agricultural than they were in 1911. As before, industries occupy more people in the Western Plain and Sub-Himalaya West than elsewhere. It will be seen that the East takes very little part in the administration. Persons living on their income are more numerous in Himalaya West than anywhere else, as would be expected, for the Hills are the refuge of the pensioner.

Subsidiary Table III condenses the statistics of individual districts and states. Tehri State and the Gorakhpur district have the enormous agricultural percentages of 95 and 92 respectively. The leading industrial district, strangely enough, is Bijnor (25 per cent.). Agra has the highest figure for commerce (12); and Muttra (26), Lucknow (26), and Dehra Dun (25) for the professions. These last two districts are occupationally the most interesting and deserve detailed study in the Imperial Tables. For a typical district—if it is desired to examine one in the same place—I would suggest Shahjahanpur.

Women
Workers.

Occupations
by Locality.

*Occupation
by Caste.*

22. Subsidiary Table VIII gives in terms of a proportion the main occupa-

Caste.	Traditional occupa- tion.	Percentage following traditional occupa- tion.	
		In 1911.	In 1921.
Kachhi *		89	90
Ko-ri	Agriculture	88	87
Kurmi		84	85
Lodha		86	86
Agarwal		73	71
Barhai	Carpentry	42	41
Bhangi	Scavenging	77	75
Bharbhuija	Grain parching	57	56
Dhobi	Washing	53	50
Kayasth	Writing	33	31
Kumhar	Pottory	43	41
Nai	Hair-dressing	53	52
Sonar	Gold and jewelry	74	71
Teli	Oil-pressing	41	43
Brahman	Priestcraft	8	7

tion followed by certain selected races and castes. The traditional occupation—where such can be said to exist—is in each case shown first. The Table reveals no striking development since 1911. What it does indicate is what other statistics already considered would lead one to expect: that while the agricultural castes have maintained their hold on agriculture, almost every other caste has in a small degree abandoned, for agriculture, its traditional occupation. The marginal statement illustrates this point.

Practically all races and castes have a small proportion—but ordinarily a very small proportion—of their members engaged in general industries: even Brahmans and Rajputs have 1 per cent. each, and Kayasths 3. Indian Christians have far the highest percentage (43). The next highest figures are those of the Shaikhs (16), Saiyids (13), Khatiks (11), Anglo-Indians (9) and Pathans (8). It will be noticed that the only Hindu caste included in this list is that of the Khatiks.

A few other points deserve notice. The percentage of Julahas who weave remains constant at 51. Chamars who work in leather now number 5 instead of 4 per cent. This increase is clearly due to the growing popularity of boots. In a wholly different sphere the percentage of Bhats who still pursue their ancient calling of bardcraft has risen from 13 to 15.

These details are suggestive. In a province where two civilizations are jostling one another, and the people are accepting so much (and no more) of the new, and retaining so much of the old, as suits their ways of life; where a flood of oratory is being outpoured to persuade the masses to signify their adherence to the old by wearing homespun clothes made in the old way: the weavers who make the homespun are neither more nor fewer than before. The people listen to the oratory, and even applaud it, because they enjoy that sort of thing. It never occurs to the audience (and seldom probably to the orator) that any one would dream of altering his habits because of anything he hears. Meanwhile it appears that money is still to be made indifferently by the manufacture of footwear, or by the recitation of epics.

* Strictly speaking, the traditional occupation of Kachhis is market gardening.

Subsidiary Table I.—General distribution by occupation.

Class, sub-class, and order.	Number per 10,000 of total population.		Percentage in each class, sub-class and order of—	
	Persons supported	Actual workers.	Actual workers.	Dependents.
1	2	3	4	5
All occupations	10,000	5,339	53	47
A.—PRODUCTION OF RAW MATERIALS	7,680	4,161	54	46
I.—Exploitation of animals and vegetation	7,678	4,160	54	46
1 Pasture and agriculture	7,672	4,157	54	47
(a) Ordinary cultivation	7,489	4,022	54	46
(b) Growers of special products and market gardening	6	3	53	47
(c) Forestry	7	4	62	38
(d) Raising of farm stock	169	128	76	24
(e) Raising of small animals	*	*	34	66
2. Fishing and hunting	6	3	51	49
II.—Exploitation of minerals	2	1	59	45
3. Mines	*	*	69	31
4. Quarries of hard rocks	*	*	62	38
5. Salt, etc.	1	1	57	43
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	1,626	816	50	50
III.—Industry	1,096	569	52	48
6. Textiles	220	119	54	46
7. Hides, skins and hard materials from the animal kingdom	42	18	43	57
8. Wood	84	37	44	56
9. Metals	58	23	40	60
10. Ceramics	70	37	53	47
11. Chemical products properly so called, and analogous	85	49	58	42
12. Food Industries	128	78	61	39
13. Industries of dress and the toilet	201	131	65	35
14. Furniture industries	1	*	44	56
15. Building industries	21	8	39	61
16. Construction of means of transport	*	*	35	65
17. Production and transmission of physical forces (heat, light, electricity, motive power, etc.)	*	*	31	69
18. Other miscellaneous and undefined industries	126	68	54	46
IV.—Transport	86	35	41	59
19. Transport by air	*	*	6	94
20. Transport by water	5	2	42	58
21. Transport by road	44	18	42	58
22. Transport by rail	33	13	40	60
23. Post office, Telegraph and Telephone services	4	2	38	62
V.—Trade	443	212	48	52
24. Banks, establishments of credit, exchange and insurance	24	9	38	62
25. Brokerage, commission and export	7	2	32	68
26. Trade in textiles	31	12	39	61
27. Trade in skins, leather and furs	2	1	39	61
28. Trade in wood	1	*	37	63
29. Trade in metals	1	*	33	67
30. Trade in pottery, bricks and tiles	*	*	48	52
31. Trade in chemical products	3	1	39	61
32. Hotels, cafés, restaurants, etc.	5	2	46	54
33. Other trade in food stuffs	303	153	51	49
34. Trade in clothing and toilet articles	5	2	38	62
35. Trade in furniture	3	1	41	59
36. Trade in building materials	*	*	35	65
37. Trade in means of transport	14	5	38	62
38. Trade in fuel	18	11	58	42
39. Trade in articles of luxury and those pertaining to letters and the arts and sciences.	9	4	46	54
40. Trade of other sorts	17	7	43	57

Subsidiary Table I.—*General distribution by occupation—(concluded).*

Class, sub-class, and order.	Number per 10,000 of total population.		Percentage in each class, sub-class and order of—	
	Persons supported.	Actual workers.	Actual workers.	Dependents.
1	2	3	4	5
C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS ..	215	89	42	58
VI.—Public force.. ..	54	26	49	51
41. Army	17	9	54	46
42. Navy	•	•	32	68
43. Air force.. ..	•	•	81	19
44. Police	37	17	45	55
VII.—Public administration	53	18	35	65
45. Public administration	53	18	35	65
VIII.—Professions and liberal arts	105	44	42	58
46. Religion	55	23	42	58
47. Law	8	3	31	69
48. Medicine	12	5	48	52
49. Instruction	17	7	44	56
50. Letters and arts and sciences	13	6	48	52
D.—MISCELLANEOUS	479	271	57	43
IX.—Persons living on their income	9	3	36	64
51. Persons living principally on their income	9	3	36	64
X.—Domestic service	179	102	57	43
52. Domestic service	179	102	57	43
XI.—Insufficiently described occupations	202	113	56	44
53. General terms which do not indicate a definite occupation.	202	113	56	44
XII.—Unproductive	87	53	61	39
54. Inmates of jails, asylums and almshouses.. ..	4	4	93	7
55. Beggars, vagrants, prostitutes	83	49	60	40

Subsidiary Table II.—*Distribution by occupation in natural divisions.*

Occupation.	Number per mille of total population supported in—							
	Himalaya, West.	Sub-Himalaya, West.	Indo-Gangetic Plain, West.	Indo-Gangetic Plain, Central.	Central India Plateau.	East Satpuras.	Sub-Himalaya, East.	Indo-Gangetic Plain, East.
1	2	3	4	5	6	7	8	9
A.—PRODUCTION OF RAW MATERIALS	806	696	676	780	744	769	897	801
I.—Exploitation of animals and vegetation	806	696	676	780	744	769	897	801
II.—Exploitation of minerals	•	•	•	•	•	•	•	•
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	69	212	236	145	187	148	73	151
III.—Industry	43	151	161	97	119	91	45	108
IV.—Transport.. ..	6	11	11	10	20	2	4	5
V.—Trade	20	60	64	38	48	55	26	40
C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS	24	27	27	22	26	21	9	16
VI.—Public force	10	7	7	6	8	8	2	8
VII.—Public administration	4	7	7	5	7	4	3	5
VIII.—Professions and liberal arts	10	13	13	11	11	14	4	8
D.—MISCELLANEOUS	41	64	61	53	43	62	21	32
IX.—Persons living on their income	2	1	1	1	1	•	•	1
X.—Domestic service	15	23	25	17	18	17	9	15
XI.—Insufficiently described occupations	18	33	24	25	15	39	6	11
XII.—Unproductive	6	9	11	10	9	6	6	5

Subsidiary Table III.—Distribution of the agricultural, commercial, industrial, and professional population in natural divisions and districts.

District and natural divisions.	Agriculture.				Industry.				Commerce.				Professions.				Others.			
	Population supported by agriculture.	Proportion of agricultural population per 1,000 of district population.	Percentage of agricultural population of—		Population supported by industry.	Proportion of industrial population per 1,000 of district population.	Percentage of industrial population of—		Population supported by commerce.	Proportion of commercial population per 1,000 of district population.	Percentage of commercial population of—		Population supported by professions.	Proportion of professional population per 1,000 of district population.	Percentage of professional population of—		Population supported.	Proportion of population per 1,000 of district population.	Percentage of population of—	
			Actual workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
United Provinces	34,863,405	750	54	46	5,108,261	110	52	48	2,462,647	53	47	53	498,480	11	42	58	3,587,875	77	59	41
Himalaya, West	1,555,691	853	67	33	79,344	43	58	42	46,637	25	55	45	18,422	10	51	49	122,942	67	71	29
Dohra Dun	112,715	531	62	38	22,240	105	49	51	17,872	84	54	46	5,200	25	42	58	54,156	255	68	32
Naini Tal	201,018	726	63	37	25,313	92	57	43	15,314	55	58	42	3,486	12	54	46	31,744	115	67	33
Almora	459,867	924	68	32	11,945	22	62	38	7,796	15	50	50	4,086	8	52	48	16,634	31	79	21
Garhwal	450,043	928	68	32	14,377	19	65	35	4,758	10	60	40	3,214	7	55	45	12,514	26	80	20
Tehri State	301,448	947	67	33	5,769	18	70	30	937	8	54	46	2,316	7	55	45	7,884	25	71	29
Sub-Himalaya, West	3,020,550	673	42	58	678,756	151	51	49	272,096	60	42	58	57,715	13	42	58	461,452	102	56	44
Saharanpur	496,577	510	43	57	185,916	197	52	48	77,896	83	45	55	20,082	21	49	51	157,800	168	48	52
Bareilly	688,718	679	42	58	150,129	148	49	51	68,720	68	44	56	10,876	11	39	61	95,423	94	51	49
Bijnor	413,000	658	41	59	187,459	253	50	50	46,593	63	50	64	14,066	20	34	66	78,434	106	55	45
Filibit	308,480	715	39	61	50,594	117	52	48	24,829	57	43	57	4,290	10	45	55	43,408	100	58	42
Kheri	779,917	854	45	55	66,885	62	56	42	24,386	26	49	51	4,483	5	52	48	47,849	52	68	32
Rampur State	333,858	786	34	66	49,343	107	45	54	29,715	65	56	64	3,313	7	55	65	38,378	84	46	54
Indo-Gangetic Plain, West	8,005,561	659	44	56	1,949,843	161	50	50	942,161	78	43	57	165,331	13	42	58	1,082,567	89	53	47
Muzaffarnagar	439,220	553	45	55	162,686	205	53	44	71,163	89	46	54	14,229	18	45	55	108,987	134	58	42
Meerut	839,969	574	47	53	301,144	201	52	48	131,443	88	43	57	23,080	15	41	59	183,486	122	55	45
Bulandshahr	686,184	645	44	56	193,130	187	52	48	73,620	69	42	58	11,074	10	43	57	94,511	89	53	47
Aligarh	682,526	615	39	61	194,315	183	49	51	91,745	86	43	57	13,694	13	37	63	109,515	103	54	46
Muttra	346,317	592	43	57	89,774	145	50	40	72,693	117	47	53	16,195	26	43	57	74,154	120	48	52
Agra	516,461	529	45	55	180,285	196	47	53	116,130	124	39	61	13,439	14	40	60	97,800	106	47	53
Mainpuri	588,783	747	41	59	93,490	126	49	51	85,842	48	46	54	7,618	10	51	49	52,291	70	57	43
Etah	605,607	730	39	61	108,850	125	49	51	51,671	64	44	56	10,381	12	46	54	55,248	66	53	47
Budoun	725,004	743	51	49	133,043	136	61	39	47,267	48	43	57	10,205	10	34	66	59,838	61	54	46
Moradabad	819,049	683	38	62	191,482	160	48	52	76,327	64	40	60	14,527	13	38	62	97,268	81	50	50
Shahjahanpur	690,942	705	41	59	111,704	133	40	60	48,811	58	49	61	11,756	14	31	69	75,962	90	46	54
Farrukhabad	631,351	747	45	55	105,700	123	51	49	56,310	66	47	53	10,088	12	51	49	54,879	61	55	45
Etawah	552,145	762	49	51	83,200	113	56	44	64,104	90	46	54	8,707	12	55	45	23,876	32	89	11

Subsidiary Table III.—Distribution of the agricultural, commercial, industrial, and professional population in natural divisions and districts.

District and natural divisions.	Agriculture.				Industry.				Commerce.				Professions.				Others.			
	Population supported by	Proportion of agricultural population per 1,000 of district population.	Percentage of agricultural population of—		Population supported by	Proportion of industrial population per 1,000 of district population.	Percentage of industrial population of—		Population supported by	Proportion of commercial population per 1,000 of district population.	Percentage of commercial population of—		Population supported by	Proportion of professional population per 1,000 of district population.	Percentage of professional population of—		Population supported.	Proportion of population per 1,000 of district population.	Percentage of population of—	
			Actual workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.			Actual workers.	Dependents.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Indo-Gangetic Plain, Central.	9,107,690	764	57	49	1,154,938	97	55	45	577,204	48	45	52	135,325	11	41	59	945,632	79	60	40
Cawnpore ..	707,118	668	53	47	136,639	119	53	47	88,441	75	45	55	21,799	19	39	61	136,667	119	58	43
* Fatehpur ..	805,985	776	61	39	64,274	103	57	43	24,977	28	49	51	5,564	8	44	56	48,628	74	66	84
Allahabad ..	1,099,138	701	63	37	118,965	84	56	44	86,728	62	47	53	15,745	11	39	61	113,669	81	61	39
Lucknow ..	391,396	539	61	39	86,720	121	54	46	81,197	113	46	54	16,840	26	39	61	146,821	202	54	46
Unao ..	652,506	708	56	44	79,768	98	53	44	31,760	39	44	56	8,163	10	43	57	46,931	57	69	41
Nae Bareilly ..	754,999	803	63	37	89,971	96	59	41	35,977	38	51	49	7,983	8	43	57	48,174	61	62	38
Sitapur ..	866,139	795	52	48	90,974	83	56	44	38,600	85	47	53	9,198	8	49	51	84,577	77	57	43
Hardoi ..	869,215	802	45	55	104,151	96	69	31	39,497	80	47	53	9,309	8	47	53	62,238	57	62	38
Fyzabad ..	928,095	786	55	45	118,271	101	52	48	45,899	39	55	45	10,729	9	52	48	78,936	63	66	36
Sultampur ..	745,533	743	53	47	93,185	92	47	53	52,090	52	55	45	17,171	17	26	74	95,938	95	55	45
Partabgarh ..	736,438	861	61	39	63,897	75	55	45	19,180	22	59	41	2,897	8	46	54	33,258	39	72	28
Bara Banki ..	816,237	812	58	42	104,525	101	52	48	34,969	34	48	52	9,133	9	47	53	55,100	53	57	43
Central India Plateau	1,479,563	716	63	37	246,971	119	59	41	138,695	67	49	51	22,130	11	48	52	177,938	66	64	36
Jbansi ..	383,866	638	61	39	81,184	134	56	44	65,585	108	43	57	7,457	12	42	58	68,418	113	60	40
Jaloun ..	294,297	725	60	40	49,814	123	60	40	22,332	55	50	50	5,443	13	56	44	33,553	83	61	39
Hamirpur ..	322,280	732	64	36	58,081	132	61	39	20,348	46	55	45	4,906	11	45	55	34,780	79	65	35
Banda ..	479,180	762	67	33	57,893	95	62	38	30,580	60	59	41	4,344	7	52	48	41,187	67	73	27
East Satpuras	787,953	723	57	43	93,415	91	44	56	62,665	57	56	44	15,041	14	34	66	123,064	113	64	36
Mirzapur ..	500,518	691	57	43	73,598	100	43	57	48,047	66	58	42	11,472	16	27	73	91,868	127	60	40
Benares State ..	287,440	792	57	43	26,117	72	46	54	14,538	46	52	48	3,569	10	54	46	31,196	46	75	25
Sub-Himalayas, East	6,826,195	833	61	39	344,685	41	51	49	219,094	28	54	46	31,669	4	44	56	308,890	40	64	36
Gorakhpur ..	8,008,530	919	62	38	103,665	32	59	41	65,418	20	57	43	9,194	8	51	49	85,053	26	70	30
Basti ..	1,778,586	921	60	40	62,097	32	60	40	39,944	21	54	46	3,782	2	57	43	45,889	24	74	26
Gonda ..	1,135,152	770	58	42	126,682	86	41	59	81,967	56	54	46	14,184	9	37	63	116,223	78	56	44
Bhadrach ..	913,977	858	62	38	52,241	49	51	49	31,765	30	52	48	4,869	4	41	59	62,725	59	63	37
Indo-Gangetic Plain, East	4,077,943	777	54	46	555,909	106	52	48	232,927	45	51	49	42,647	8	43	57	386,941	64	64	36
Benar s ..	580,633	645	55	45	143,905	159	50	50	66,377	73	47	53	18,855	21	38	62	91,542	101	58	42
Jaunpur ..	876,297	758	53	47	113,773	58	54	46	60,279	52	49	51	7,440	6	39	61	93,316	85	59	41
Ghazipur ..	673,703	808	56	44	78,010	94	55	45	32,044	38	50	50	6,832	8	45	55	41,710	50	63	37
Balia ..	656,049	769	51	49	91,340	110	54	46	34,204	41	51	49	5,925	6	44	56	44,193	63	67	33
Amargah ..	1,392,266	846	55	45	40,025	84	55	45	40,025	16	55	45	4,805	8	47	53	63,180	41	73	27

Subsidiary Table IV.—Occupations combined with agriculture (where agriculture is the subsidiary occupation).

Occupation.	Number per mille of workers who are partially agriculturists.								
	Province.	Himalaya, West.	Sub-Himalaya, West.	Indo-Gangetic Plain, West.	Indo-Gangetic Plain, Central.	Central India Plateau.	East Satpuras.	Sub-Himalaya, East.	Indo-Gangetic Plain, East.
1	2	3	4	5	6	7	8	9	10
All occupations	27.6	17.4	20.0	19.3	31.3	34.7	88.2	29.0	28.1
A.—PRODUCTION OF RAW MATERIALS	5	2	2	2	6	4	26	7	6
I.—Exploitation of animals and vegetation	5	2	2	2	6	4	26	7	6
II.—Exploitation of minerals	101	54	208	74	90	115	*	122	95
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES.	110	129	57	52	144	147	336	234	135
III.—Industry	120	150	65	55	157	166	332	181	140
(1) Textiles	66	..	..	..	..	..	..	..	..
(2) Wood	153	..	..	..	..	..	..	..	..
(3) Metals	241	..	..	..	..	..	..	..	..
(4) Food	73	..	..	..	..	..	..	..	..
(5) Dress and the toilet	148	..	..	..	..	..	..	..	..
(6) Others	114	..	..	..	..	..	..	..	..
IV.—Transport	57	78	51	36	57	46	289	131	107
V.—Trade	114	59	47	44	178	128	344	165	121
(1) In food stuffs	113	..	..	..	..	..	..	..	..
(2) In textiles	100	..	..	..	..	..	..	..	..
(3) Other trades	122	..	..	..	..	..	..	..	..
C.—PUBLIC ADMINISTRATION AND LIBERAL ARTS	131	191	54	69	160	177	363	208	146
VI.—Public force	219	183	1.2	95	117	248	286	290	120
VII.—Public administration	109	192	50	97	162	117	319	132	144
VIII.—Professions and liberal arts	123	200	59	65	114	132	404	209	168
D.—MISCELLANEOUS	78	96	33	35	87	74	277	127	76
IX.—Persons living on their income	95	288	69	52	123	32	*	75	19
X.—Domestic service	77	91	33	40	104	117	295	123	98
XI.—Insufficiently described occupations	67	105	32	30	65	14	274	184	200
XII.—Unproductive	74	24	30	46	105	70	455	89	40

Subsidiary Table V.—Occupations combined with agriculture (where agriculture is the principal occupation).

Group 1.—Landlords (Rent receivers).		Group 2.—Cultivators (Rent payers).		Groups 3, 4 and 5.—Land agents, farm servants and field labourers.	
Subsidiary occupation.	Number per 10,000 actual workers who follow it.	Subsidiary occupation.	Number per 10,000 actual workers who follow it.	Subsidiary occupation.	Number per 10,000 actual workers who follow it.
1	2	3	4	5	6
Total all subsidiary occupations.	3,239		1,579		1,940
Rent payers	2,175	Rent receivers	185	Rent receivers	65
Agricultural labourers	183	Agricultural labourers	361	Rent payers	663
Pensioners	31	General labourers	68	General labourers	196
Money-lenders and grain dealers.	172	Pensioners	5	Village watchmen	11
Other traders of all kinds	135	Money-lenders and grain dealers.	22	Cattle breeders and milkmen	183
Pleasers	5	Other traders of all kinds	62	Mill hands	20
Clerks of all kinds (except Government servants).	29	Fishermen and boatmen	8	Fishermen and boatmen	9
School Masters	85	Cattle breeders and milkmen	58	Rice pounders	15
Lawyers' clerks and petition writers.	11	Village watchmen	13	Traders of all kinds	18
Estate agents and managers	35	Weavers	18	Oil pressers	32
Medical practitioners	14	Oil pressers	41	Weavers	11
Artisans	81	Potters	18	Potters	25
Others	339	Blacksmiths and carpenters	53	Leather workers	36
		Other artisans	56	Blacksmiths and carpenters	24
		Others	608	Other artisans	37
				Others	645

Subsidiary Table VI.—Occupations of females by sub-classes and selected orders and groups.

Group number.	Occupation.	Number of actual workers		Number of females per 1,000 males
		Males.	Females.	
	All occupations	16,376,508	8,429,755	515
Class A ..	Production of raw materials.. ..	12,752,502	6,800,990	518
<i>Sub-class I ..</i>	<i>Exploitation of animals and vegetation</i>	<i>12,749,154</i>	<i>6,599,471</i>	<i>518</i>
Order No. 1 ..	Pasture and agriculture	12,739,312	6,595,590	518
Do. 1 (a) ..	Ordinary cultivation	12,260,190	6,444,719	526
Group No. 1 ..	Income from rent of agricultural land	248,871	84,194	339
Do. 2 ..	Ordinary cultivators	10,503,582	5,301,401	505
Do. 3, 4 and 5.	Agents, managers of landed estates (not planters), clerks, rent collectors, etc., farm servants, field labourers	1,507,737	1,059,124	702
Order No. 1 (b) ..	Growers of special products and market gardening	10,826	5,026	464
Group No. 6 ..	Tea, coffee, cinchona, rubber and indigo plantations	255	182	518
Do. 7 ..	Fruit, flower, vegetable, betel, vine, areca nut, etc. growers.	10,571	4,894	483
Order No. 1 (c) ..	Forestry	132,284	6,527	494
Do. 1 (d) ..	Raising of farm stock	454,938	130,194	300
Do. 1 (e) ..	Raising of small animals	130	24	185
Do. 2 ..	Fishing and hunting	9,842	3,881	394
<i>Sub-class II ..</i>	<i>Exploitation of minerals</i>	<i>3,348</i>	<i>1,519</i>	<i>453</i>
Order No. 3 ..	Mines	679	19	28
Do. 5 ..	Quarries of hard rocks	667	567	849
Do. 5 ..	Salt, etc.	2,002	938	4.6
Class B ..	Preparation and supply of material substances ..	2,464,523	1,332,804	540
<i>Sub-class III ..</i>	<i>Industry</i>	<i>1,616,244</i>	<i>1,029,966</i>	<i>637</i>
Order No. 6 ..	Textiles	308,608	245,850	795
Group Nos. 25-27..	Cotton ginning, cleaning and pressing, cotton spinning, cotton sizing and weaving.	278,548	218,305	777
Do. 31-33..	Wool carding and spinning, weaving of woollen blankets, weaving of woollen carpets	7,012	7,381	1,050
Do. 34-35..	Silk spinners, silk weavers	1,194	1,183	1,077
Do. 36-38..	Hair, camel, and horse hair. Dyeing, bleaching, printing, preparation and sponging of textiles. Lace, crop, embroideries, fringes, etc., and insufficiently described textile industries.	12,383	5,000	403
Order No. 7 ..	Hides, skins and hard materials from the animal kingdom.	64,095	18,602	288
Do. 8 ..	Wood	144,029	26,441	184
Do. 9 ..	Metals	100,384	8,105	81
Do. 10 ..	Ceramics	107,289	63,500	592
Do. 11 ..	Chemical products properly so called, and analogous	122,116	107,151	882
Do. 12 ..	Food industries	126,343	285,577	1,865
Group No. 65 ..	Rice pounders and huskers and flour grinders	13,424	159,154	11,856
Do. 67 ..	Grain parchers, etc.	62,197	70,083	1,127
Do. 68 ..	Butchers	30,477	3,952	108
Do. 71 ..	Makers of sugar, molasses, and gur	6,515	497	76
Do. 72 ..	Sweetmeat makers, preparers of jam and condiments, etc.	6,101	1,320	216
Group Nos. 66-75	Industries of dress and the toilet	1,629	571	351
Order No. 13 ..	Tailors, milliners, dress-makers, darners and embroideries on linen.	474,430	198,038	473
Group No. 77 ..	Shoe, boot and sandal makers	86,932	51,885	592
Do. 78 ..	Washing, cleaning and dyeing	64,911	9,785	151
Do. 80 ..	Barbers, hair dressers and wig makers	113,299	93,813	855
Do. 81 ..	Other industries connected with the toilet (tattoos, shampoos, bath houses, etc.).	147,899	87,175	151
Do. 82 ..	Furniture industries	1,895	810	603
Order No. 14 ..	Building industries	1,297	499	388
Do. 15 ..	Construction of means of transport	33,482	3,731	112
Do. 16 ..	Production and transmission of physical forces (heat, light, electricity, motive power, etc.).	323	34	105
Do. 17 ..	Other miscellaneous and undefined industries	240	16	67
Do. 18 ..	Sweepers, scavengers, etc.	193,143	124,422	644
Group No. 103 ..	Transport	101,136	114,972	1,137
<i>Sub-class IV ..</i>	<i>Transport by air</i>	<i>157,766</i>	<i>7,500</i>	<i>48</i>
Order No. 19 ..	Transport by water	1	..	..
Do. 20 ..	Transport by road	9,367	859	92
Do. 21 ..	Transport by rail	81,607	4,702	58
Do. 22 ..	Post Office, Telegraph and Telephone services	60,045	1,846	31
Do. 23 ..	Trails	6,676	93	14
<i>Sub-class V ..</i>	<i>Banks, establishments of credit, exchange and insurance.</i>	<i>690,479</i>	<i>295,838</i>	<i>428</i>
Order No. 24 ..	Brokerage, commission and export	34,620	8,478	245
Do. 25 ..	Trade in textiles	8,994	1,140	127
Order No. 26 ..	Trade in skins, leather and furs	50,194	6,014	120
Do. 27 ..	Trade in wood	3,137	475	151
Do. 28 ..	Trade in metals	1,404	260	185
Do. 29 ..	Trade in chemical products	933	143	153
Do. 31 ..	Trade in chemical products	4,384	818	187

Subsidiary Table VI.—*Occupations of females by sub-classes, and selected orders and groups—(concluded).*

Group number.	Occupation.	Number of actual workers.		Number of females per 1,000 males.
		Males.	Females.	
Order No. 82	Hotels, cafés, restaurants, etc.	8,055	1,465	182
Do. 83	Other trade in food stuffs	476,489	236,940	498
Group No. 181	Fish dealers	2,058	793	386
Do. 182	Grocers and sellers of vegetable, oil, salt and other condiments.	43,370	18,499	427
Do. 183	Sellers of milk, butter, ghee, poultry, eggs, etc. ..	52,666	43,153	819
Do. 184	Sellers of sweetmeats, sugar, gur and molasses ..	40,902	11,561	277
Do. 185	Cardamom, betel-leaf, vegetables, fruit and areca nut sellers.	92,695	79,478	863
Do. 186	Grain and pulse dealers	204,749	49,565	241
Do. 187	Tobacco, opium, ganja, etc., sellers	18,268	8,414	461
Do. 189	Dealers in hay, grass and fodder	17,445	25,380	1,455
Order No. 84	Trade in clothing and toilet articles	8,750	622	71
Do. 85	Trade in furniture	4,022	616	153
Do. 86	Trade in building materials	658	107	162
Do. 87	Trade in means of transport	23,990	1,225	51
Do. 88	Trade in fuel	23,011	26,458	1,106
Do. 89	Trade in articles of luxury and those pertaining to letters and the arts and sciences.	12,526	6,542	522
Do. 40	Trade of other sorts	28,742	4,650	162
Group No. 158	Itinerant traders, pedlars, hawkers, etc.	8,881	2,644	298
Class C	Public administration and liberal arts	346,554	46,392	140
Sub-class VI	Public force	120,821	2,357	19
Order No. 41	Army	41,837	712	17
Do. 42	Navy	65	30	461
Do. 43	Air force	148	1	7
Do. 44	Police	78,774	1,614	20
Sub-class VII	Public administration	63,161	1,916	30
Order No. 45	Professions and liberal arts	162,569	44,119	271
Order No. 46	Religion	87,691	19,747	225
Do. 47	Law	11,407	295	26
Do. 48	Medicine	12,100	11,793	967
Group No. 172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	2,779	11,079	3,987
Order No. 49	Instruction	31,875	2,544	80
Do. 50	Letters and arts and sciences	19,503	9,740	499
Group No. 178	Music composers and masters, players on all kinds of musical instruments (not military), singers, actors and dancers.	15,027	8,922	594
Class D	Miscellaneous	812,929	441,569	531
Sub-class IX	Persons living principally on their income	11,907	3,267	274
Order No. 51	Domestic service	283,328	189,604	668
Group No. 181	Cooks, water-carriers, door-keepers, watchmen and other ind. or servants.	261,175	189,028	723
Sub-class XI	Insufficiently described occupations, general terms which do not indicate a definite occupation.	352,068	172,171	488
Order No. 53	Labourers and workmen otherwise unspecified	320,118	163,825	512
Sub-class XII	Unproductive	165,627	82,527	498
Order No. 54	Inmates of jails, asylums and almshouses	15,709	484	31
Do. 55	Beggars, vagrants, prostitutes	140,628	82,003	548
Group No. 189	Beggars, vagrants, witches, wizards, etc.	140,610	72,840	518
Do. 190	Procurers and prostitutes	9,018	9,168	1,016
Order No. 56	Other unclassified non-productive industries	290	40	138

Subsidiary Table VII.—*Selected occupations, 1921, 1911 and 1901.*

Group number.	Occupation.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	Percentage of variation.
1	2	3	4	5	6
	<i>Sub-class I.—Exploitation of animals and vegetation</i> ..	35,709,790	35,267,372	32,309,357	+1.25
	<i>Order No. 1.—Pasture and Agriculture</i>	35,682,633	35,222,317	32,260,043	+1.3
	<i>Order No. 1 (a)—Ordinary cultivation</i>	34,833,693	34,327,109	31,614,865	+1.5
1	Income from rent of agricultural land	818,437	866,419	3,447,881	-5.5
2	Ordinary cultivators	20,843,168	28,712,015	23,534,772	+3.9
3	Agents, managers of landed estates (not planters), clerks, rent collectors, etc.	136,201	196,722	255,919	-30.8
4 & 5	Farm servants and field labourers	4,035,887	4,552,043	4,376,293	-11.3
	<i>Order No. 1 (b)—Growers of special products and market gardening.</i>	29,762	56,178	125,125	-47.8
6	Tea, coffee, cinchona, rubber and indigo plantations ..	620	2,789	4,770	-77.7
7	Fruit, flower, vegetable, betel, vine, areca nut, etc., growers	29,142	53,889	120,355	-45.7

Subsidiary Table VII.—*Selected occupations, 1921, 1911 and 1901—(continued).*

Group number.	Occupation.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	Percentage of variation.
		3	4	5	6
9 & 10	<i>Order No. 1 (c).—Forestry</i>	31,760	58,709	48,491	-45.9
	Woodcutters, firewood, catechu, rubber, etc., collectors and charcoal-burners.	25,856	50,941	45,814	-40.8
	<i>Order No. 1 (d).—Raising of farm stock</i>	786,960	778,992	471,376	+1.0
11	Cattle and buffalo-breeders and keepers	48,569	16,075	25,835	+202.1
12	Sheep, goat, and pig-breeders	11,118	16,978	11,906	-84.5
13	Breeders of other animals (horses, mules, camels, asses, etc.)	1,854	1,148	8,880	+61.4
14	Herdsmen, shepherds, goatherds, etc.	725,819	744,791	425,255	-2.6
	<i>Order No. 1 (e).—Raising of small animals</i>	458	939	186	-51.2
	<i>Order No. 2.—Fishing and hunting</i>	27,167	45,055	49,314	-39.7
17	Fishing	22,941	38,331	36,208	-40.1
18	Hunting	4,213	6,724	13,111	-87.8
	<i>Sub-class II.—Exploitation of minerals</i>	8,208	8,808	18,098	-6.8
	<i>Order No. 3.—Mines</i>	1,017	164	332	+560.4
	<i>Order No. 4.—Quarries of hard rocks</i>	2,003	2,904	72	-31.0
	<i>Order No. 5. Salt, etc.</i>	5,183	5,750	17,194	-9.9
	<i>Sub-class III.—Industry</i>	5,100,053	5,834,384	6,241,145	-12.6
	<i>Order No. 6.—Textiles</i>	1,025,744	1,166,112	1,411,895	-12.1
25	Cotton ginning, cleaning and pressing	100,993	115,865	149,659	-12.8
26 & 27	Cotton spinning, sizing and weaving	820,069	853,183	1,120,912	-3.9
28	Jute spinning, pressing and weaving	2,445	6,136	73	-60.2
29	Rope, twine and string	38,400	42,167	19,587	-50.8
31, 32, & 33	Wool-carding and spinning and weaving of woollen blankets and carpets.	26,076	40,388	46,183	-35.3
34 & 35	Silk spinners and weavers	2,705	16,044	12,666	-83.1
36	Hair, camel, and horse hair	889	1,145	1,799	-66.1
37	Dyeing, bleaching, printing, preparation and sponging of textiles.	22,322	50,589	30,669	-55.8
	<i>Order No. 7.—Hides, skins, and hard materials from the animal kingdom.</i>	194,965	131,889	201,876	+17.8
39	Tanners, curriers, leather-dressers and leather dyers, etc.	84,453	122,961	193,786	-31.0
40	Makers of leather articles, such as trunks, water bags, saddlery or harness, etc., excluding articles of dress.	109,137	4,906	4,516	+2124.6
41	Furriers and persons occupied with feathers and bristles, brush-makers.	511	937	1,160	-45.4
42	Bone, ivory, horn, shell, etc., workers (except button)	861	3,685	2,424	-76.7
	<i>Order No. 8.—Wood</i>	398,193	485,880	534,301	-20.1
43 & 44	Sawyers, carpenters, turners and joiners, etc.	296,402	351,471	309,800	-15.7
45	Basket-makers and other industries of woody material, including leaves and thatchers and builders working with bamboo, reeds or similar materials.	91,791	134,409	134,501	-81.7
	<i>Order No. 9.—Metals</i>	272,523	286,922	378,292	-5.0
48	Other workers in iron and makers of implements and tools, principally or exclusively of iron.	229,788	235,688	312,625	-2.9
49	Workers in brass, copper, and bell-metal	32,476	28,785	42,880	-16.3
	<i>Order No. 10.—Ceramics</i>	324,938	366,212	41,706	-11.3
55	Potters and earthen pipe and bowl-makers	286,559	333,043	1,261	-14.0
	<i>Order No. 11.—Chemical products, properly so called and analogous.</i>	397,589	428,541	473,304	-7.2
61 & 62	Manufacture and refining of vegetable and mineral oils	887,435	407,439	411,898	-4.9
	<i>Order No. 12.—Food industries</i>	593,976	790,172	766,250	-24.8
65	Rice pounders and huskers and flour-grinders	241,019	320,888	309,026	-24.8
66	Bakers and biscuit-makers	1,780	6,251	6,051	-71.8
67	Grain parchers, etc.	212,086	251,129	317,291	-15.6
68	Butchers	90,352	113,749	112,849	-12.7
69	Fish curers	18	79	70	-88.5
71	Makers of sugar, molasses and gur	18,934	31,086	65,865	-39.0
72	Sweetmeat makers, preparers of jam and condiments, etc.	17,462	62,066	24,832	-71.8
73	Brewers and distillers	496	663	4,270	-24.9
74	Toddy-drawers	347	1,298	2,768	-78.2
	<i>Order No. 13.—Industries of dress and the toilet</i>	1,216,123	1,344,007	1,550,981	-9.5
77	Tailors, milliners, dress-makers, darners and embroiderers on linen.	268,374	302,490	324,323	-12.9
78	Shoe, boot and sandal-makers	178,658	166,095	124,741	+4.6
80	Washing, cleaning and dyeing	364,352	379,213	471,024	-3.9
81	Barbers, hairdressers and wig-makers	418,587	482,183	621,104	-18.2
	<i>Order No. 14.—Furniture industries</i>	3,985	6,324	6,283	-37.8
	<i>Order No. 15.—Building industries</i>	96,616	140,566	127,422	-31.3
84	Excavators and well-sinkers	509	1,006	19,028	-49.4
87 & 88	Stone-cutters and dressers and bricklayers and masons	78,779	96,714	16,284	-18.5
	<i>Order No. 16.—Construction of means of transport</i>	1,024	3,841	4,814	-78.3
	<i>Order No. 17.—Production and transmission of physical forces (heat, light, electricity, motive power, etc.).</i>	833	735	1,037	+16.6
	<i>Order No. 18.—Other miscellaneous and undefined industries</i>	251,010	317,787	326,554	-21.0
98	Workers in precious stones and metals, enamellers, imitation jewellery-makers, gilders, etc.	219,101	235,894	263,095	-7.1
	Makers of bangles or beads or necklaces of other material than glass and makers of spangles, rosaries, lingams and sacred threads.	22,130	49,472	50,956	-55.2
102 & 103	Contractors for the disposal of refuse, dust, etc., and sweepers, scavengers, etc.	339,597	365,406	416,470	-9.0

Subsidiary Table VII.—*Selected occupations 1921, 1911 and 1901—(continued).*

Group number.	Occupation.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	Percentage of variation.
1	2	3	4	5	6
	<i>Sub-class IV—Transport</i>	402,376	449,610	505,226	—10.5
107	<i>Order No. 20.—Transport by water</i>	24,248	39,453	60,646	—38.5
	Shipowners and their employes, ship brokers, ships' officers, engineers, mariners and firemen	696	710	131	—2.0
108	Persons (other than labourers) employed on the maintenance of streams, rivers and canals (including construction).	12,749	13,597	9,109	—6.2
110	Boat owners, boatmen and tow-men	9,057	24,903	41,219	—63.7
	<i>Order No. 21.—Transport by road</i>	204,420	254,307	359,636	—19.6
111 & 112	Persons (other than labourers) employed on the construction and maintenance of roads and bridges and labourers employed on roads and bridges.	9,497	20,924	7,581	—51.6
113 & 114	Owners, managers and employes (excluding personal servants) connected with mechanically driven vehicles (including trams) and owners, managers and employes connected with other vehicles.	138,083	134,037	128,457	+3.0
115	Palki, etc., bearers and owners	9,073	21,680	52,777	—58.1
116	Pack elephant, camel, mule, ass and bullock owners and drivers.	25,815	39,201	123,622	—34.1
117	Porters and messengers	21,951	38,465	47,199	—42.9
	<i>Order No. 22.—Transport by rail</i>	155,793	128,976	75,573	+20.7
118	Railway employes of all kinds other than coolies ..	184,232	113,005	69,961	+18.8
119	Labourers employed on railway construction and maintenance and coolies and porters employed on railway premises.	20,371	15,971	5,612	+81.3
	<i>Order No. 23.—Post office, Telegraph and Telephone services</i>	17,987	26,874	19,371	—33.1
120	Post office, telegraph and telephone services ..	17,987	26,874	19,371	—33.1
	<i>Sub-class V.—Trade</i>	2,060,374	2,140,395	2,130,140	—3.75
	<i>Order No. 24.—Banks, establishments of credit, exchange and insurance.</i>	113,960	144,283	164,469	—21.0
	<i>Order No. 25.—Brokerage, commission and export ..</i>	31,454	29,411	85,363	+6.9
	<i>Order No. 26.—Trade in textiles</i>	115,706	133,429	162,912	+9.2
	<i>Order No. 27.—Trade in skins, leather and furs ..</i>	9,587	10,752	10,942	—10.8
	<i>Order No. 28.—Trade in wood</i>	4,550	8,198	13,296	—44.6
	<i>Order No. 29.—Trade in metals</i>	3,275	9,633	589	—66.0
	<i>Order No. 30.—Trade in pottery, bricks and tiles ..</i>	1,993	3,382	58,885	—41.1
	<i>Order No. 31.—Trade in chemical products</i>	13,408	20,359	58,562	—34.1
	<i>Order No. 32.—Hotels, cafés, restaurants, etc. ..</i>	20,581	28,723	14,561	—28.4
129	Vendors of wine, liquors, aerated water and ice ..	16,583	22,938	30,808	—27.7
130	Owners and managers of hotels, cookshops, sarais, etc., and their employes.	3,998	5,785	14,253	—30.9
	<i>Order No. 33.—Other trade in food stuffs</i>	1,408,301	1,426,535	1,301,792	—1.3
131	Fish dealers	5,479	11,562	18,968	—52.7
132	Grocers and sellers of vegetable oil, salt and other condiments.	119,753	102,595	250,135	+16.6
133	Sellers of milk, butter, ghee, poultry, eggs, etc. ..	187,029	114,655	109,873	+68.2
134	Sellers of sweetmeats, sugar, gur and molasses ..	110,959	74,840	105,555	+49.2
135	Cardamom, betel-leaf, vegetables, fruit and areca-nut sellers.	299,630	305,017	234,605	—1.8
136	Grain and pulse dealers	549,830	680,906	674,926	—20.0
137	Tobacco, opium, ganja, etc., sellers	56,175	73,259	53,283	—23.3
138	Dealers in sheep, goats, and pigs	13,282	9,046	14,687	+46.8
139	Dealers in hay, grass and fodder	65,372	49,219	39,501	+32.8
	<i>Order No. 34.—Trade in clothing and toilet articles ..</i>	24,757	59,091	31,289	—58.2
140	Trade in ready-made clothing and other articles of dress and the toilet (hats, umbrellas, socks, ready-made shoes, perfumes, etc.)	24,757	59,091	31,288	—58.2
	<i>Order No. 35.—Trade in furniture</i>	11,438	16,146	80,032	—29.2
142	Hardware, cooking utensils, porcelain, crockery, glassware, bottles, articles of gardening, etc.	8,853	13,459	65,466	—34.2
	<i>Order No. 36.—Trade in building materials</i>	2,167	3,926	5,265	—44.8
143	Trade in building materials other than bricks, tiles and woody materials.	2,167	3,926	5,265	—44.8
	<i>Order No. 37.—Trade in means of transport</i>	67,041	46,442	60,683	+44.3
146	Dealers and hirers of elephants, camels, horses, cattle asses, mules, etc.	67,041	46,441	60,683	+44.3
	<i>Order No. 38.—Trade in fuel</i>	83,376	93,044	5,627	—10.4
147	Dealers in firewood, charcoal, coal, cowdung, etc. ..	83,376	93,044	5,627	—10.4
	<i>Order No. 39.—Trade in articles of luxury and those pertaining to letters and the arts and sciences.</i>	41,683	52,383	62,466	—20.4
148	Dealers in precious stones, jewellery (real and imitation), clocks, optical instruments, etc.	4,858	2,971	5,218	+63.5
149	Dealers in common bangles, bead necklaces, fans, small articles, toys, hunting and fishing tackle, flowers, etc.	33,966	43,777	53,858	—22.4
	<i>Order No. 40.—Trade of other sorts</i>	77,784	54,651	98,408	+42.3
152	General storekeepers and shopkeepers otherwise unspecified.	44,926	26,124	40,496	+71.9
154	Other trades (including farmers of pounds, tolls and markets).	5,702	7,536	8,282	—14.3

Subsidiary Table VII.—*Selected occupations 1921, 1911 and 1901—(concluded).*

Group number.	Occupation.	Population supported in 1921.	Population supported in 1911.	Population supported in 1901.	Percentage of variation.
1	2	3	4	5	6
	<i>Sub-class VI.—Public force</i>	253,508	336,627	329,836	—24.7
	<i>Order No. 41.—Army</i>	78,821	61,180	53,757	+28.8
165	Army Imperial	74,831	55,437	53,809	+35.0
156	Army (Indian States)	3,990	5,748	448	—80.5
	<i>Order No. 42.—Navy</i>	299	17	27	+1660.0
	<i>Order No. 44.—Police</i>	174,199	275,430	276,050	—36.7
169	Police	76,204	85,623	86,060	—11.0
160	Village watchmen	76,441	189,807	190,000	—59.6
	<i>Sub-class VII.—Public Administration</i>	245,862	269,593	315,089	—8.8
	<i>Order No. 45.—Public Administration</i>	121,147	123,022	137,858	—1.5
161	Service of the State	5,083	18,551	11,153	—72.9
162	Service of Indian and foreign States	20,252	20,897	33,785	—38.1
163	Municipal and other local (not village service)	99,380	106,823	132,293	—7.0
164	Village officials and servants other than watchmen				
	<i>Sub-class VIII.—Professions and liberal arts</i>	488,480	534,027	624,356	—8.5
	<i>Order No. 46.—Religion</i>	237,316	271,187	369,777	—5.1
165	Priests, ministers, etc.	244,068	204,284	230,299	+20.0
166	Religious mendicants, inmates of monasteries, etc.	1,198	24,559	87,929	—95.0
167	Catechists, readers, church and mission service	2,766	5,062	33,108	—45.4
168	Temple, burial or burning ground service, pilgrim conductors, circumcisers.	8,087	37,282	18,444	—76.7
	<i>Order No. 47.—Law</i>	37,238	37,516	38,123	—0.7
169	Lawyers of all kinds, including <i>kasis</i> , law agents and mukhtars.	15,948	16,867	20,280	—5.5
170	Lawyers, clerks, petition writers, etc.	21,290	20,649	17,843	+3.1
	<i>Order No. 48.—Medicine</i>	56,001	62,105	53,008	—9.8
171	Medical practitioners of all kinds, including dentists, oculists and veterinary surgeons.	33,087	30,050	29,135	+10.1
172	Midwives, vaccinators, compounders, nurses, masseurs, etc.	22,914	32,055	23,873	—28.6
	<i>Order No. 49.—Instruction</i>	77,188	66,906	58,268	+15.4
173 & 174	Professors and teachers of all kinds, and clerks and servants connected with education.	77,188	66,906	58,268	+15.4
	<i>Order No. 50.—Letters and Arts and Sciences</i>	61,176	96,313	105,680	—36.5
177	Authors, editors, journalists, artists, photographers, sculptors, astronomers, meteorologists, botanists, astrologers, etc.	4,019	3,456	11,987	+17.8
178	Music composers and masters, players on all kinds of musical instruments (not military), singers, actors and dancers.	48,027	82,568	82,673	—41.8
	<i>Sub-class IX.—Persons living on their income.</i>	42,027	69,839	89,515	—39.8
180	<i>Order No. 51.</i>	42,027	69,839	89,515	—39.8
	Proprietors (other than of agricultural land), fund and scholarship-holders and pensioners.	833,444	921,214	1,213,967	—9.5
	<i>Sub-class X.—Domestic service</i>	833,444	921,214	1,213,967	—9.5
181	<i>Order No. 52.—Domestic service</i>	782,068	845,017	1,157,513	—7.4
	Cooks, water-carriers, door keepers, watchmen and other indoor servants.	48,748	76,197	56,454	—36.0
182	Private grooms, coachmen, dog, boys, etc.	941,111	1,661,094	3,268,353	—43.3
	<i>Sub-class XI.—Insufficiently described occupations</i>	941,111	1,661,094	3,268,353	—43.3
	<i>Order No. 53.—General terms which do not indicate a definite occupation.</i>	16,064	16,090	53,574	—0.2
184	Manufacturers, businessmen and contractors otherwise unspecified.	75,298	80,493	75,511	+90.6
185	Cashiers, accountants, book keepers, clerks and other employés in unspecified offices, warehouses and shops.	848,002	1,608,727	3,138,349	—47.2
187	Labourers and workmen otherwise unspecified	404,960	521,117	660,203	—29.8
	<i>Sub-class XII.—Unproductive</i>	17,413	24,599	26,737	—29.2
188	<i>Order No. 54.—Inmates of jails, asylums and almshouses</i>	17,413	24,599	26,737	—29.2
	Inmates of jails, asylums and almshouses	337,547	496,518	633,466	—22.0
189 & 190	<i>Order No. 55.—Beggars, vagrants, prostitutes</i>	337,547	496,518	633,466	—22.0
	Beggars, vagrants, witches, wizards, etc., procurers and prostitutes.				

Subsidiary Table VIII.—Occupations of selected castes.

Caste and occupation.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 1,000 male workers.	Caste and occupation.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 1,000 male workers.
1. AGARWAL	1,000	90	9. BRAHMAN	1,000	187
Traders, bankers, shopkeepers of all kinds.	705	55	Priesthood	70	371
Agriculture and stock-raising ..	143	118	Agriculture and stock-raising ..	818	186
Public force, administration, arts and professions.	27	11	Industry	11	1,366
Persons living on their income ..	25	633	Trade	23	141
Domestic service	19	162	Public force and administration ..	13	..
Others	81	285	Arts and professions	11	50
			Domestic service	18	229
			Begging and other unproductive occupations.	16	514
			Others	20	187
2. AHIR	1,000	646	10. CHAMAR	1,000	673
Owners, breeders and sellers of the produce of cattle.	109	275	Leather workers	51	183
Ordinary agriculture	838	715	Agriculture and stock-raising ..	786	677
Artisans, transport workers and labourers.	35	732	Other industries	39	2,196
Others	20	397	Trade	11	1,541
			Domestic service	12	188
			Labourers unspecified	84	755
			Others	17	548
3. ANGLO-INDIAN	1,000	390	11. DHOTI	1,000	630
Agriculture	29	510	Washing clothes	500	848
Industry	87	210	Agriculture and stock-raising ..	474	439
Transport	212	112	Others	26	485
Trade	42	280			
Public force and administration ..	183	62	12. EUROPEAN	1,000	53
Arts and professions	225	1,725	Industry	15	267
Persons living on their income ..	135	819	Transport	101	6
Others	87	151	Trade	23	207
			Public force	648	..
			Public administration	104	20
			Arts and professions	58	855
			Persons living on their income ..	22	449
			Contractors, clerks and cashiers ..	11	94
			Others	18	545
4. ARMENIAN	1,000	667	13. GADARIYA	1,000	518
Transport	133	..	Shepherds, goatherds and blanket weavers.	209	551
Trade	67	..	Ordinary agriculture	722	513
Public force and administration ..	333	..	Industry	17	2,261
Arts and professions	400	5,000	Domestic service	8	417
Persons living on their income ..	67	1,000	Labourers unspecified	20	190
			Others	24	284
5. BARHAI	1,000	239	14. GUJAR	1,000	127
Carpenters and wood workers ..	409	33	Owners, breeders and sellers of cattle.	143	245
Agriculture and stock-raising ..	521	431	Ordinary agriculture	780	98
Other industries	32	844	Industry	15	831
Others	38	282	Domestic service	16	190
			Labourers unspecified	23	151
			Others	23	132
6. BHANGI	1,000	735	15. HALWAI	1,000	348
Scavengers	750	985	Confectioners	681	353
Agriculture and stock-raising ..	147	239	Agriculture and stock-raising ..	138	291
Industry	35	339	Industry	22	408
Trade	12	260	Trade	126	363
Other domestic service	20	350	Others	33	346
Others	36	231			
7. BHARBHUNJA	1,000	596	16. INDIAN CHRISTIAN	1,000	533
Grain parchers	563	935	Agriculture and stock-raising ..	332	271
Agriculture and stock-raising ..	333	328	Industry	427	894
Industry	18	555	Trade	28	583
Trade	60	165	Public force and administration ..	37	..
Others	26	185	Arts and professions	52	1,172
			Domestic service	49	269
8. BHAT	1,000	434	Labourers unspecified	31	805
Bards and genealogists	147	700	Unproductive	12	903
Agriculture and stock-raising ..	653	364	Others	32	306
Industry	23	2,308			
Trade	25	228			
Public force and administration, arts and professions.	22	208			
Domestic service	15	303			
Begging and other unproductive industries.	69	758			
Others	46	274			

Subsidiary Table VIII.—Occupation of selected castes—(continued).

Caste and occupation.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 1,000 male workers.	Caste and occupation.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 1,000 male workers.
17. JAT	1,000	78	25. KUMHAR	1,000	646
Land-owning and cultivation ..	840	69	Potters	411	662
Other occupations connected with land.	85	81	Agriculture and stock-raising ..	514	665
Industry	21	902	Other industries	19	756
Public force and administration ..	9	..	Transport	12	122
Labourers unspecified	20	54	Trade	16	326
Others	24	140	Labourers unspecified	19	516
			Others	9	617
18. JULAHA	1,000	521	26. KURNI	1,000	545
Weavers	508	526	Cultivators	848	512
Agriculture and stock-raising ..	388	547	Other natural products	101	882
Other industries	56	826	Industry	15	1,553
Trade	25	318	Labourers unspecified	11	630
Domestic service	18	442	Others	25	258
Labourers unspecified	33	308			
Others	22	174	27. LODHA	1,000	491
19. KACHHI	1,000	486	Cultivation and agricultural labour.	862	486
Opium and vegetable producers and sellers.	153	1,498	Other natural products	44	340
Agriculture and stock-raising ..	745	354	Industry	27	816
Industry	12	885	Labourers unspecified	31	703
Transport	11	567	Others	36	442
Trade	9	592			
Labourers unspecified	56	709	28. LOHAR	1,000	373
Others	14	395	Blacksmiths and iron workers ..	320	83
20. KAHAR	1,000	602	Agriculture and stock-raising ..	571	538
Personal service and palanquin-carriers.	342	982	Other industries	46	345
Agriculture and stock-raising ..	485	400	Labourers unspecified	19	461
Industry	65	1,161	Others	44	2,109
Trade	22	560			
Labourers unspecified	57	580	29. LUNIYA	1,000	639
Others	29	159	Saltpetre makers and earthworkers	63	387
21. KALWAR	1,000	481	Agriculture and stock-raising ..	871	892
Liquor distillers and sellers ..	64	294	Labourers unspecified	30	946
Agriculture and stock-raising ..	533	531	Others	36	594
Industry	22	998			
Trade	327	476	30. NAI	1,000	498
Others	54	217	Barbers	523	428
22. KAYASTH	1,000	981	Agriculture and stock-raising ..	401	478
Clerical work of all kinds	307	16	Domestic service	89	2,244
Agriculture and stock-raising ..	425	143	Others	87	800
Industry	28	264			
Transport	19	122	31. PASI	1,000	707
Trade	41	268	Tari-makers	7	528
Public force	18	..	Agriculture and stock-raising ..	913	719
Public administration	73	..	Other industries	17	133
Arts and professions	44	91	Public force	12	..
Domestic service	29	227	Labourers unspecified	28	896
Others	16	536	Others	23	486
23. KHATIK	1,000	304			
Fruit and vegetable sellers and butchers.	159	348	32. PATHAN	1,000	243
Agriculture and stock-raising ..	483	202	Agriculture and stock-raising ..	667	279
Industry	113	801	Industry	78	437
Transport	30	184	Transport	39	34
Trade	80	360	Trade	54	54
Domestic service	33	135	Public force	28	..
Labourers unspecified	75	617	Public administration	42	..
Others	27	104	Domestic service	55	246
24. KORI	1,000	842	Others	40	368
Cultivation	866	760			
Other natural products	92	101	33. RAJPUT	1,000	243
Industry	15	910	Military service, Government ser-	447	350
Domestic service	8	911	vice, land holders.	..	..
Labourers unspecified	8	486	Cultivation and stock-raising ..	498	154
Others	11	564	Industry	11	985
			Trade	9	250
			Domestic service	9	185
			Labourers unspecified	11	228
			Others	15	175

Subsidiary Table VIII.—*Occupations of selected castes—(concluded).*

Caste and occupation.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 1,000 male workers.	Caste and occupation.	Number per 1,000 workers engaged in each occupation.	Number of female workers per 1,000 male workers.
34. SAIVID	1,000	194	36. SONAR	1,000	139
Agriculture and stock-raising ..	510	191	Goldsmiths, jewellers, silver-smiths.	709	49
Industry	125	402	Agriculture and stock-raising ..	221	892
Trade	67	81	Other industries	23	1,145
Public force	45	..	Trade	14	545
Public administration	33	..	Others	33	400
Arts and professions	40	43			
Domestic service	54	371	37. TELI	1,000	588
Labourers unspecified	38	299	Oil pressers and sellers	433	760
Unproductive	29	294	Agriculture and stock-raising ..	487	479
Others	55	172	Other industries	18	783
35. SHAIKH	1,000	258	Trade	20	813
Agriculture and stock-raising ..	519	291	Labourers unspecified	21	525
Industry	163	330	Others	15	300
Transport	35	43			
Trade	105	167			
Public force and administration ..	36	..			
Arts and professions	25	156			
Labourers unspecified	25	215			
Domestic service	55	308			
Unproductive	19	560			
Others	18	252			

NOTE.—(1) The figures in this table are calculated on the principal occupations for actual workers only. The content of the terms "Industry," etc., will be clear from Imperial Table XXI on which this is based. "Agriculture and stock-raising" is used to include all occupations in columns 14 to 25 inclusive.

(2) The first occupation shown for each of the 37 castes or races is the "traditional occupation" except in the case of nos. 3, 4, 12, 16, 32, 34, and 35, where there is none.

Subsidiary Table IX.—*Number of persons employed on the 18th March, 1921,*
(1) on railways, (2) in the Irrigation department, (3) in Posts and Telegraphs.

Class of persons employed.	Europeans and Anglo-Indians.	Indians.
(1) RAILWAYS.		
Total persons employed	2,237	100,162
Persons directly employed	2,226	86,671
Officers	149	81
Subordinates drawing more than Rs. 75 per mensem	1,681	1,844
Ditto from Rs. 20 to 75 per mensem	400	23,910
Ditto under Rs. 20 per mensem	6	60,886
Persons indirectly employed	1	13,491
Contractors	1	879
Contractors' regular employes .. .. .	..	1,879
Coolies .. .. .	..	10,733
(2) IRRIGATION DEPARTMENT.		
Total persons employed	47	36,519
Persons directly employed	46	7,780
Officers	39	71
Upper subordinates	3	51
Lower ditto .. .. .	..	388
Clerks	2	1,795
Peons and other servants	2	4,000
Coolies .. .. .	..	1,475
Persons indirectly employed	1	28,799
Contractors	1	1,308
Contractors' regular employes .. .. .	..	1,476
Coolies .. .. .	..	26,017

Class of persons employed.	Post Office.		Telegraph department	
	Europeans and Anglo-Indians.	Indians.	Europeans and Anglo-Indians.	Indians.
(3) POSTS AND TELEGRAPHS.				
Total persons employed	28	13,602	214	1,301
Supervising officers, including Probationary Superintendents and Inspectors of Post Offices and Assistant and Deputy Superintendents of Telegraphs and all officers of higher rank than these.	8	50	21	5
Postmasters, including Deputy, Assistant, Sub and Branch Postmasters	14	973	3	..
Signalling establishment, including warrant officers, non-commissioned officers, military telegraphists and other employes.	..	83	184	124
Miscellaneous agents, school masters, station masters, etc.	2	1,527	..	..
Clerks of all kinds	8	1,473	6	82
Postmen .. .. .	..	4,723	..	..
Skilled labour establishment, including foremen, instrument-makers, carpenters, blacksmiths, mechanics, sub-inspectors, linemen, line-riders and other employes.	..	399	..	225
Unskilled labour establishment, including line coolies, cable guards, battery-men, telegraph messengers, peons, and other employes.	..	1,120	..	765
Road establishment consisting of overseers, runners, clerks and booking agents, boatmen, sycos, coachmen, bearers and others.	..	2,286	..	..
Railway Mail Service	1	968	..	..
Supervising officers, including Superintendents and Inspectors of Sorting.	1	18	..	..
Clerks of all kinds .. .. .	..	2	..	..
Sorters .. .. .	..	614	..	..
Mail guards, mail agents, van peons, porters, etc.	..	320	..	..
Messengers .. .. .	..	..	..	..
Other servants.. .. .	..	14	..	..

Industrial Subsidiary Table I.—Distribution of industries and persons employed.

Industrial establishment.		Total number of establishment.	General distribution of industries and persons employed.																		
Industrial establishment.	1	2	Districts where chiefly employed.	Number of persons employed.																	
				Total.				Direction, supervision and clerical.				Skilled workmen.		Unskilled labourers.							
				Europeans and Anglo-Indians.		Indians.		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
				Males.	Females.	Males.	Females.													Males.	Females.
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	Number of adult females employed per 1,000 males.		Number of children of both sexes employed per 1,000 adults.			
Districts where chiefly employed.																					

Industrial Subsidiary Table III.—Organisation of establishments.

Type of organisation.	Total number of establishments.	I	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI
1. Under the Local Government or Local authority	47	9	2	2	1	4	7	1	1	15	..	..	..	..	3	2
2 Registered companies	122	5	1	31	3	1	18	9	8	22	2	1	2	10	6	3
(a) With European or Anglo-Indian Directors.	70	4	1	14	..	1	17	4	4	6	1	..	2	9	6	1
(b) With Indian Directors	37	..	..	12	2	..	1	5	2	12	1	1	..	..	..	1
(c) With Directors of different races ..	15	1	..	5	1	..	..	..	2	4	..	..	..	1	..	1
3. Privately owned	1,202	48	54	71	12	11	150	164	183	293	74	12	50	7	10	63
(a) By Europeans or Anglo-Indians ..	49	10	..	8	1	..	2	2	3	8	6	2	..	1	..	6
(b) By Indians	1,153	38	54	63	11	11	148	162	180	285	68	10	50	6	10	57
(c) By joint owners of different races ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,371	62	57	104	16	16	175	174	192	330	76	13	52	17	19	68

NOTE. — The figures I to XVI in this and tables VI, VII and VIII represent the same Industrial Groups as are detailed in Industrial tables I and II immediately preceding.

Industrial Subsidiary Table IV.—Place of origin of skilled employes in selected industries.

Birth place.	Tea plan- tations.		Sugarcane plantations.		Cotton gin- ning, clean- ing and pressing mills.		Cotton, spin- ning and weaving mills.		Woolen mills.		Woolen car- pet factories.		Brass, tin and copper works.		Glass bangle factories.		Lac factories.		Rice and flour mills.		Sugar factories.		Boot and shoe factories.		Printing presses.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
I.—In the Province or State—																											
(a) District of employ- ment.	145	..	20	..	1,578	208	4,309	69	537	..	182	1	519	..	539	..	723	79	351	2	846	32	570	1	1,385	..	
(b) Other districts ..	55	..	14	..	708	97	4,080	75	967	..	37	..	11	..	207	4	6	..	444	..	421	21	114	..	1,504	..	
II.—Outside the Province—																											
(a) Bengal ..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	1	..	..	..	8	..	..	1	..	..	..
(b) Bihar and Orissa ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	..	..	..	..	..	..
(c) Punjab ..	2	..	..	..	49	..	6	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
(d) Rajputana ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..
(e) Gwalior ..	..	..	..	..	..	..	43	..	5	..	..	..	..	..	2	..	2	..	2	..	..	..	..	..	..	..	..
(f) Bombay ..	..	..	..	..	34	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	..	..	3	..	..
(g) Central Provinces ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
(h) Baroda ..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..
(j) Delhi ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
III.—Outside India—																											
Nepal ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arabia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Total ..	202	..	34	..	2,369	305	8,441	144	1,516	..	219	1	530	..	752	4	733	79	800	2	1,289	53	684	6	2,955	1	..

Industrial Subsidiary Table V.—Place of origin of unskilled employes in selected industries.

Birth place	Tea plan-tations.		Sugarcane plan-tations.		Cotton gin-ning, clean-ing, and pressing mills.		Cotton spin-ning and weaving mills.		Woollen mills.		Woollen carpet factories.		Brass, tin and copper factories.		Glass bangle factories.		Lac actories.		Rice and flour mills		Sugar factories.		Boot and shoe factories.		Printing presses.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
I.—In the Province—																										
(1) District of employment	1,000	340	68	..	1,538	205	1,484	77	177	29	152	28	957	12	314	11	602	843	395	73	4,546	36	264	..	1,510	6
(2) Other districts	403	137	81	..	256	107	1,051	40	888	143	4	..	..	..	41	..	12	21	539	12	294	2	25	..	181	..
II.—Outside the Province—																										
Bengal ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	2	..
Bihar and Orissa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Punjab ..	17	6	..	..	29	2	4	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	3	..	3	..
Rajputana ..	..	1	..	..	25	4	13	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
Gwalior State	..	..	..	..	4	..	4	..	5	..	..	..	..	..	1	..	..	..	4	..	..	..	..	1	..	..
Bombay ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
Central India	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Provinces	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Delhi ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Central Provinces	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.—Outside India —																										
Nepal ..	26	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	38	..	..	..	..	..
Great Britain	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
America ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arabia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Total	1,446	485	149	..	1,852	378	2,564	117	1,072	173	166	28	957	12	357	11	614	864	969	85	4,903	38	293	..	1,706	6

Industrial Subsidiary Table VI.—*Distribution of certain races in certain industrial establishments.*

Industrial establishments.	Total Europeans and Anglo-Indians.		Europeans and Anglo-Indians employed as—									
			(a) Managers.		(b) Supervising staff.		(c) Clerical staff.		(d) Skilled workmen.		(e) Unskilled workmen.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13
Total (British districts) ..	393	..	151	..	544	..	130	..	65	..	3	..
I { Total group ..	33	..	20	..	12	..	..	..	1	..	..	..
Tea plantation..	12	..	8	..	4	..	..	..	..	..	..	..
Sugarcane plantation ..	..	..	..	..	..	..	..	..	..	..	..	..
III—Total group ..	3	..	1	..	3	..	1	..	..	..	..	..
Total group ..	170	..	22	..	90	..	55	..	..	..	3	..
Cotton—												
Ginning, cleaning and pressing mills.	119	..	17	..	66	..	36	..	..	..	..	..
IV { Spinning, weaving and other mills.	96	..	7	..	56	..	33	..	..	..	3	..
Wool—												
Woollen mills ..	38	..	1	..	18	..	19	..	..	..	..	..
Carpet factories ..	4	..	3	..	1	..	..	..	..	..	..	..
V—Total group ..	54	..	4	..	46	..	4	..	..	..	..	..
VI—Total group ..	25	..	5	..	19	..	1	..	..	..	..	..
VII { Total group ..	205	..	20	..	107	..	48	..	30	..	..	..
Brass, tin and copper factories.	2	..	..	..	1	..	..	..	1	..	..	..
VIII { Total group ..	11	..	2	..	4	..	5	..	..	..	..	..
Glass bangle factories ..	2	..	..	..	2	..	..	..	..	..	..	..
IX { Total group ..	38	..	7	..	14	..	..	..	17	..	..	..
Lac factories ..	4	..	1	..	3	..	..	..	..	..	..	..
X { Total group ..	103	..	28	..	60	..	6	..	11	..	..	..
Rice and flour mills ..	15	..	4	..	7	..	4	..	..	..	..	..
Sugar factories ..	34	..	11	..	22	..	1	..	..	..	..	..
XI { Total group ..	31	..	5	..	24	..	2	..	..	..	..	..
Boot and shoe factories ..	3	..	1	..	1	..	1	..	..	..	..	..
XII—Total group ..	87	..	5	..	82	..	..	..	..	..	..	..
XIII—Total group ..	4	..	1	..	3	..	..	..	..	..	..	..
XIV—Total group ..	49	..	12	..	29	..	2	..	6	..	..	..
XV—Total group ..	24	..	8	..	16	..	..	..	..	..	..	..
XVI { Total group ..	52	..	11	..	35	..	6	..	..	..	..	..
Printing presses ..	50	..	10	..	34	..	6	..	..	..	..	..

Industrial Subsidiary Table VII.—Proportional distribution of adult women and of children of each sex in different industries per 10,000 adult women and per 1,000 children of both sexes combined.

Principal industries.																																			
Women and children.	Total number employed.	I			III	V						V	VI	VII		VIII	IX		X			XI	XII	XIII	XIV	XV	XVI								
		Total group.	Tea plantation.	Sugar cane plantation.		Total group.	Cotton.			Wool.				Total group.	Total group.		Brass, tin and copper works.	Total group.	Total group.	Glass bangle factories.	Total group.							Lac factories.	Total group.	Rice and flour mills.	Sugar factories.	Total group.	Total group.	Total group.	Total group.
							Ginning, cleaning and pressing mills.	Spinning, weaving and other mills.	Woolen mills.	Carpet factories.																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
Adult women ..	10,000	1,106	933	..	687	1,474	778	105	357	58	145	45	33	23	1,270	21	2,968	1,610	462	165	78	41	..	15	1,319	411	13	12	12						
Children ..	1,000	64	49	..	331	581	80	176	..	23	19	13	31	17	129	36	119	36	134	11	84	23	15	5	73	37	11	28	28						
Males ..	251	51	41	..	17	215	80	161	..	23	17	13	31	17	98	26	83	16	132	10	64	23	15	5	40	37	11	28	28						
Females ..	149	13	8	..	16	16	..	15	..	..	2	..	..	..	31	..	36	20	2	1	..	..	..	..	33	..	..	..	..		

Industrial Subsidiary Table VIII.—*Distribution of power.*

Type of power used.	Number of industrial establishments using power by groups.																
	Total establishments.	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
British Districts.																	
Steam	235	32	..	..	69	5	4	20	7	13	82	2	2	18	5	9	15
Oil	39	2	..	..	1	1	..	8	1	..	6	4	2	..	3	..	11
Water	2	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Gas	3	..	..	..	..	..	1	1	..	..	1	..	..	..	..	..	..
Electricity	32	..	..	..	3	..	1	6	..	..	5	1	..	..	5	7	4
(a) Generated on premises ..	18	..	..	..	2	..	..	4	..	..	4	1	..	..	..	7	..
(b) Supplied from without ..	14	..	..	..	1	..	1	2	..	..	1	..	..	..	5	..	4
Total establishments using mechanical power	359	34	..	..	73	6	6	35	8	14	95	7	4	18	13	16	30
States.																	
Steam	8	..	..	..	..	..	1	1	..	1	2	..	..	3	..	..	..

Notes.—Certain establishments use more than one kind of power, but have been shown above only once, under the principal head. Under steam these establishments use oil engines also—in I, 3; in IV, 2; in VI, 1; in VII, 1; in IX, 1; in XVI, 3; in X, 1 uses electric and 1 water power also.

APPENDIX A.

Distribution and movement of population by districts, states and tahsils.

The distribution and movement of the population has been discussed, in respect of the larger territorial units, in Chapter I. Distribution and movement by districts and tahsils is dealt with in this appendix. As regards distribution, there is little or nothing new to be said, and the reader is referred to previous reports. As regards movement—by which is really meant variation—during the past decade, it has already been shown that this has depended, to a degree which obscures the influence of all other factors, on the caprice of the influenza epidemic: and what is true of the larger is equally true in all but a few instances of the smaller local units. Migration however, though barely on a scale sufficient to affect the figures of the natural divisions, has influenced district and tahsil variation in some cases.

In the following paragraphs the figures of the districts of each natural division are taken up in turn:—

2. HIMALAYA, WEST.

(1) *Dehra Dun*.—This is a healthy and, so far as the headquarters tahsil is concerned,

Dehra Dun district and tahsils.	Population.	Density	Percentage of variation 1911-1921.
District total ..	212,243	178	+3.6
Dehra ..	156,620	211	+4.3
Chakrata ..	55,623	125	+1.5
Population.	1921.	1911.	Variation.
Actual ..	212,243	204,888	+7,355
Immigrants ..	60,271	54,644	+5,627
Emigrants ..	6,392	8,867	-2,475
Natural ..	156,364	159,111	-2,747

a fertile tract: with a low density due to the preponderance of jungle. The Chakrata tahsil is entirely montane and is very sparsely populated indeed. The population has increased. But this is entirely due to the increase of immigrants and the decrease of emigrants. The natural population is stationary. Immigrants are to a small extent temporary pilgrims at Rikhikesh, but mainly professional and business men, semi-permanent settlers attracted by the growing towns of Dehra and Mussoorie: labourers from Oudh, also semi-permanent, employed in the tea gardens: together with some permanent settlers on

reclaimed lands. Emigrants are mostly the descendants of semi-permanent immigrants who have returned to their ancestral homes.

(2) *Naini Tal*.—The greater part of this district—the Tarai (Kichha) and Bhabar

Naini Tal district and tahsils.	Population.	Density.	Percentage of variation 1911-1921.
District total ..	276,875	102	-14.4
Haldwani ..	78,580	51	-8.2
Kichha ..	91,553	112	-22.3
Naini Tal ..	60,011	139	+2.4
Kashipur ..	46,731	247	-24.0
Population.	1921.	1911.	Variation.
Actual ..	276,875	323,519	-46,644
Immigrants ..	107,896	134,557	-26,661
Emigrants ..	15,003	22,863	-7,860
Natural ..	158,982	211,825	-27,843

(Haldwani), and in a lesser degree Kashipur—is extremely unhealthy, and the whole is largely under forest. The Bhabar with a very low water level can only be cultivated where it can be served by canals: and as the canals depend on small streams only, most of the tract is uninhabited except by migratory graziers and woodcutters, and Haldwani has a lower density than any other tahsil in the province.

The very large decrease of population in the Tarai and Kashipur probably reflects a growing conviction that these tracts are unsuitable, owing to their climate, for settlement by outsiders. Outsiders here, who come mainly from Rampur State and Rohilkhand, move off to their homes in the early hot weather: at the same time the Bhabar cultivators return to the hills. The current census was taken a week later than in 1911, and this fact accounts for the

bulk of the decrease in the sub-montane portion of the district. The apparent loss of the Bhabar has become an apparent gain to the Naini Tal tahsil and to the Almora district.

It will be seen that of the district's loss of population of 46 thousand, 26 thousand are immigrants. These immigrants are of course of the "periodic" variety. Emigrants are principally such children of these periodic immigrants as are born during the winter, and are not really emigrants at all.

Almora district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	530,388	98	+0.9
Almora ..	167,402	81	-13.1
Ranikhet ..	167,804		
Champawat ..	98,782		
Pithoragarh ..	28,403	156	+40.0
Population.	1921.	1911.	Variation.
Actual ..	530,388	525,670	+4,708
Immigrants ..	9,660	14,609	-4,949
Emigrants ..	53,786	58,822	-5,036
Natural ..	574,464	564,843	+9,621

(3) *Almora*.—The population is practically stationary. If the census had been taken a week earlier, as in 1911, there would almost certainly have been a decrease. The appearance of a decrease has been avoided owing to the fact that large numbers of the Bhabar cultivators—who come mostly from the Champawat tahsil—had reached their homes in the hills by March 18. Hence the smaller number of emigrants (periodic) who would normally have become more numerous. The smaller number of immigrants is due to changes in the garrison of Ranikhet and Almora, and of course to the heavy mortality of the decade.

Garhwal district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	485,186	86	+1.2
Pauri ..	121,001	86	+1.2
Lansdowne ..	203,246		
Chamoli ..	160,939		
Population.	1921.	1911.	Variation.
Actual ..	485,186	479,641	+5,545
Immigrants ..	11,634	13,789	-2,155
Emigrants ..	25,606	24,842	+763
Natural ..	499,107	490,694	+8,413

(4) *Garhwal*.—The population has very slightly increased: the district undoubtedly suffered much less from the influenza epidemic than did the province generally. Immigrants, who are mostly wives taken from neighbouring districts and states, have decreased: as would be expected, for here there is no natural increase to counterbalance heavy mortality. Emigrants, to whom the same considerations apply, are more numerous owing to larger recruitment for military and quasi-military service.

3. SUB-HIMALAYA, WEST.

(1) *Saharanpur*.—The district has suffered a fairly evenly distributed loss of population

Saharanpur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	937,471	440	-5.0
Saharanpur ..	298,062	476	-4.2
Deoband ..	191,444	4.7	-6.2
Roorkee ..	276,322	391	-5.1
Nakur ..	171,643	413	-4.4
Population.	1921.	1911.	Variation.
Actual ..	937,471	986,439	-48,968
Immigrants ..	52,864	74,416	-21,552
Emigrants ..	59,980	66,078	-6,098
Natural ..	944,587	978,101	-33,514

of 5 per cent. The figures call for no comment: the rate of decrease is about normal for the western portion of the province. It is noticeable that emigrants now outnumber immigrants. This probably means no more than that the tract (mainly that on the west bank of the Jamma) with which the district exchanges wives has suffered relatively less from influenza.

(2) *Bareilly*.—The decrease of population is very unevenly distributed. The percentage

Bareilly district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921
District total ..	1,013,875	642	-7.4
Faridpur ..	121,747	493	-6.4
Bareilly ..	314,095	1,013	-1.4
Aonla ..	197,319	644	-5.0
Mirganj ..	92,707	623	-8.7
Baheri ..	170,591	494	-18.1
Nawabganj ..	117,453	531	-8.6
Population.	1921.	1911.	Variation.
Actual ..	1,013,875	1,094,663	-80,788
Immigrants ..	80,310	107,892	-27,522
Emigrants ..	100,056	130,245	-30,189
Natural ..	1,033,621	1,117,076	-83,455

is exceedingly high in Baheri, the tahsil which adjoins the Tarai and is notoriously unhealthy. In 1901-11 this tahsil also suffered heavy losses, from which it recovered in the following decade. Mirganj and Nawabganj, the other two northern tahsils, have been harder hit than the southern portion of the district. The headquarters tahsil, thanks to the presence of the city and its suburbs, reduces the district percentage.

Both immigrants and emigrants continue to decrease in numbers. Immigrants include some operatives in Bareilly city, and emigrants some settlers in the Naini Tal Tarai. But the bulk of the migration is matrimonial.

(3) *Bijnor*.—Variation calls for no comment

Bijnor district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	740,182	395	-8.2
Bijnor ..	194,155	409	-8.1
Nagina ..	142,203	294	-14.3
Dhampur ..	253,061	551	-6.1
Najibabad ..	150,763	330	-5.2
Population.	1921.	1911.	Variation.
Actual ..	740,182	805,900	-65,718
Immigrants ..	23,307	34,301	-10,994
Emigrants ..	51,864	68,913	-17,049
Natural ..	768,739	840,512	-71,773

except in the case of Nagina which has suffered heavily. This tahsil is agriculturally precarious, and its population shows the same violent fluctuations as the Baheri tahsil of Bareilly. It lost severely in the first ten years of the century, and recovered a large part of its losses in the following decade. Emigration has decreased steadily since 1900, probably at the expense of the Kashipur and Tarai tahsils of Naini Tal. Immigrants have always been negligible.

(4) *Pilibhit*.—Population has seriously decreased. The climate is most unhealthy and

Pilibhit district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	431,001	310	-11.5
Bisalpur ..	181,443	499	-8.8
Puranpur ..	81,487	159	-12.4
Pilibhit ..	168,071	355	-13.8
Population.	1921.	1911.	Variation.
Actual ..	431,001	487,617	-56,616
Immigrants ..	49,800	62,728	-12,928
Emigrants ..	42,551	59,324	-16,773
Natural ..	424,322	484,213	-59,891

agriculture precarious. Losses are heaviest in the two northern tahsils, and Bisalpur, which had gained least in 1911, has lost least in 1921. These phenomena are common also to Bareilly and Bijnor, as has already been seen. Both emigrants and immigrants are much fewer than ten years ago. Immigration had already begun to decline in 1911: in a keen market for labour Pilibhit is too unattractive to be able to compete. For the decline of emigration it is difficult to account; but the movement is mainly matrimonial, and matrimonial emigration is only brisk in prosperous times.

(5) *Kheri*.—The decrease here has been little more than normal, and Kheri stands

Kheri district (and tahsils.)	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	918,475	307	—4·8
Muhamdi ..	258,925	383	—6·4
Nighasan ..	285,941	280	—1·4
Lakhimpur ..	373,609	349	—6·0
Population.	1921.	1911.	Variation.
Actual ..	918,475	959,208	—45,733
Immigrants ..	64,653	111,378	—46,725
Emigrants ..	42,879	56,828	—14,449
Natural ..	891,201	904,658	—13,457

midway between its western neighbour Pilibhit, which has lost severely, and its eastern neighbour Bahraich, which has gained slightly in population. It is very noticeable that along the foot of the hills conditions of health appear to have been progressively better from West to East, from Naini Tal right across to Basti. Here the losses are concentrated in the southern tahsils. Nighasan in the north has suffered least: in 1911 it was found to have prospered least. The reason for violent fluctuation in one half of the district, combined with comparative steadiness in the other, here as elsewhere is to me inexplicable.

There is a very big fall in the number of immigrants, but for which the population would be almost stationary. Immigration had begun to decline in 1911, and the reason given in the last report—that reclamation of the jungle had practically ceased—is thus corroborated. The greater part of a generation has now passed since reclamation was carried on on any appreciable scale, and few of the descendants of the original settlers will have been shown as immigrants.

4. INDO-GANGETIC PLAIN, WEST.

(1) *Muzaffarnagar*.—Losses have been slight and are confined to the east of the district,

Muzaffarnagar district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	794,265	479	—1·6
Muzaffarnagar ..	221,827	478	—2·3
Kairana ..	205,632	455	+·7
Jansath ..	186,413	410	—6·8
Budhana ..	180,993	631	+2·3
Population.	1921.	1911.	Variation.
Actual ..	794,265	807,543	—13,278
Immigrants ..	73,669	95,517	—21,848
Emigrants ..	66,690	67,629	—939
Natural ..	787,286	779,655	+7,631

especially Jansath. Kairana and Budhana have actually increased. The reason for the heavy losses in Jansath are not clear, but as the tahsil contains a considerable tract of riverain (Khadir) country on the right bank of the Ganges, which is precarious and carries a population largely migratory, the figures may be connected with the very large decrease of immigration: which accounts for more than the whole of the district's losses. This decrease is a repetition of what was found in 1911, and all that can be said is that the reason assigned in the last report—movement to escape plague—was evidently incorrect.

(2) *Meerut*.—The population just fails to be stationary. The figures are strictly analogous to those of Muzaffarnagar. Losses

Meerut district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,499,074	652	—·3
Meerut ..	290,063	1,055	+2·2
Ghaziabad ..	263,103	590	—·2
Mawana ..	185,548	440	—6·1
Bughpat ..	302,124	744	+2·7
Sardhana ..	212,300	621	—·6
Hapur ..	245,936	634	—2·2
Population.	1921.	1911.	Variation.
Actual ..	1,499,074	1,504,186	—5,112
Immigrants ..	126,967	150,227	—23,270
Emigrants ..	120,459	124,643	—4,187
Natural ..	1,492,576	1,478,605	+13,971

are concentrated in the eastern half of the district—in the two tahsils Mawana and Hapur, which border the Ganges—and are associated with a big decrease of immigrants, which more than accounts for the decline of the district as a whole. Meerut is agriculturally prosperous; and the figures reveal what is revealed elsewhere (e.g. in Gorakhpur) that the tracts with the highest density tend most to increase in population. It follows that variation is not connected with the margin of subsistence—a point that has been stressed in the body of the report.

(3) *Bulandshahr*.—The figures show a normal and fairly evenly distributed decrease of 5 per cent. There was a decrease also in 1911. As in 1911, the principal losses are found in Sikandarabad and Khurja; these are the two westerly tahsils bordering on the Jamna, so that the conditions of Meerut and Muzaffarnagar are reversed. The easterly tahsils which have suffered least have the highest density. Immigrants are much fewer than in 1911, in which year they were much fewer than in 1901. I am unable to hazard a reason for the decline of immigration; all that can be said is that plague, which was blamed in the last report, was evidently not responsible.

Bulandshahr district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,066,519	530	-5.0
Anupshahr ..	265,207	588	-4.3
Bulandshahr ..	319,515	671	-4.1
Sikandarabad ..	298,976	462	-5.9
Khurja ..	242,821	528	-6.2
Population.	1921.	1911.	Variation.
Actual ..	1,066,519	1,123,132	-56,613
Immigrants ..	92,068	114,317	-22,249
Emigrants ..	106,173	113,535	-7,363
Natural ..	1,000,623	1,122,350	-41,727

(4) *Aligarh*.—The district has suffered heavy losses, Iglas and in a smaller degree Sikandra Rao being especially hard hit. The northern tahsils as in 1901-11 have fared best.

Immigrants as in the rest of the northern Doab have decreased considerably.

Aligarh district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,061,745	546	-8.9
Atrauli ..	186,794	545	-8.2
Aligarh ..	239,078	672	-7.1
Iglas ..	100,733	473	-13.2
Khair ..	166,681	410	-6.9
Hathras ..	191,878	662	-9.0
Sikandra Rao ..	176,581	524	-10.9
Population.	1921.	1911.	Variation.
Actual ..	1,061,745	1,165,680	-103,935
Immigrants ..	102,827	139,478	-36,651
Emigrants ..	134,402	150,958	-16,556
Natural ..	1,003,320	1,177,160	-83,840

(5) *Muttra*.—Losses have been no more than normal : which is surprising, for agriculturally this district has probably had a more unfavourable decade than any other in the province. Sadabad however, which has the highest density, has a percentage of decrease almost double that of any other tahsil. In 1901-11 the district declined very much more markedly (by 14 per cent.), and Sadabad suffered least (6.5 per cent.).

Both immigration and emigration have declined, but immigration in the greater degree, and emigrants now outnumber immigrants by about 15,000. In 1911 and 1901 migration was found to balance itself almost exactly.

Muttra district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	619,138	427	-5.7
Sadr tahsil ..	191,078	478	-5.1
Chhata ..	134,522	331	-3.8
Mat ..	85,385	383	-5.7
Mahaban ..	116,984	487	-4.5
Sadabad ..	91,108	507	-10.5
Population.	1921.	1911.	Variation.
Actual ..	619,138	656,310	-37,172
Immigrants ..	76,609	113,238	-36,629
Emigrants ..	91,279	112,425	-21,146
Natural ..	633,808	655,497	-21,689

(6) *Agra*.—The population has been almost decimated. It decreased appreciably also in

Agra district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	924,155	498	—9·6
Itmadpur ..	134,686	483	—9·8
Firozabad ..	109,840	541	—5·1
Bah ..	104,730	306	—16·7
Fatehabad ..	96,168	460	—16·6
Sadr tahsil ..	277,707	1,152	—2·3
Kiraoli ..	99,201	965	—10·0
Kheragarh ..	101,823	330	—15·0

Population.	1921.	1911.	Variation.
Actual ..	924,155	1,021,847	—97,692
Immigrants ..	102,668	139,717	—37,059
Emigrants ..	140,893	172,715	—31,822
Natural ..	962,390	1,051,845	—89,455

the last decade. In 1911 Bah and Fatehabad alone showed increases: these tahsils now show the biggest decreases. Big decreases are also shown by Kiraoli and Kheragarh: these are all trans-Jamna tahsils.

The tahsils with the highest densities, Sadr and Firozabad, have suffered least.

Migration of both kinds has declined enormously.

It is useless to attempt to account for the degree of variation as between districts. It must be due, to an extent that conceals all minor causes, to the capricious incidence of the influenza epidemic.

(7) *Mainpuri*.—The district has suffered severely, though not so severely as its neighbour

Mainpuri district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	748,027	447	—6·2
Mainpuri ..	160,560	416	—5·8
Bhongaon ..	216,442	472	—1·1
Karhal ..	91,028	418	—9·3
Shikohabad ..	145,680	496	—7·7
Mustafabad ..	134,317	424	—9·8

Population.	1921.	1911.	Variation.
Actual ..	748,027	797,624	—49,597
Immigrants ..	67,873	110,389	—42,516
Emigrants ..	73,164	96,825	—23,171
Natural ..	753,308	783,560	—30,252

Agra. Mustafabad declined very seriously in 1901-11, and again shows the heaviest losses. Of the remaining tahsils Karhal and Shikohabad, which had slight increases in 1911, have now declined the most.

Immigrants have decreased by over 40 per cent. and emigrants very considerably. Emigrants now for the first time outnumber immigrants.

(8) *Etah*.—Losses here have been normal and

Etah district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	829,760	483	—4·8
Sadr Tahsil ..	236,088	492	—4·4
Kasganj ..	267,402	542	—2·5
Aliganj ..	220,242	424	—2·4
Jalesar ..	106,028	467	—15·0

Population.	1921.	1911.	Variation.
Actual ..	829,760	871,372	—41,612
Immigrants ..	92,219	126,851	—34,632
Emigrants ..	86,853	104,837	—17,983
Natural ..	824,393	849,358	—24,965

would have been less than normal but for the very heavy decrease shown by Jalesar. This tahsil also showed the biggest decrease in 1911, and the smallest increase in 1901. It adjoins the Sadabad tahsil of the Muttra district, which has been similarly hard hit.

Both immigrants and emigrants are much fewer than in 1911, but especially the former, and migration has now almost reached an equilibrium.

(9) *Budaun*.—The population which had increased slightly in 1911 now shows a large decrease, especially in Dataganj. This tahsil lying between the Ramganga and Ganges rivers contains considerable riverain tracts. The tahsils with the highest density, Budaun and Bisauli, have suffered least. Migration has declined only proportionately.

Budaun district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	975,347	484	-7.5
Gunnaur ..	149,977	415	-8.5
Bisauli ..	197,474	549	-6.2
Sahaswan ..	187,997	442	-8.9
Budaun ..	244,271	544	-3.2
Dataganj ..	195,628	467	-12.3
Population	1921.	1911.	Variation.
Actual ..	975,347	1,053,953	-78,606
Immigrants ..	78,605	98,089	-19,484
Emigrants ..	99,720	116,499	-16,779
Natural ..	996,462	1,072,363	-75,901

(10) *Moradabad*.—Though it has lost heavily Moradabad has lost less than its neighbours: the favourable comparison being clearly due to the presence of three cities.

Moradabad district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,198,658	525	-5.1
Moradabad ..	247,876	792	-2.1
Thakurdwara ..	107,652	449	-11.3
Harai ..	210,077	631	-5.5
Sambhal ..	245,600	524	7.7
Amroha ..	213,696	558	-1.4
Hasanpur ..	173,752	316	-5.2
Population	1921.	1911.	Variation.
Actual ..	1,198,658	1,262,933	-64,280
Immigrants ..	70,747	85,381	-14,634
Emigrants ..	107,917	138,604	-30,687
Natural ..	1,235,823	1,316,156	-80,333

The headquarters and Amroha tahsils have weathered the decade best, though Sambhal shows a surprising decline. The exceptional increase of population in the previous decade was attributed to the large Muhammadan element; that the underlying argument here is unsound is shown in chapter IV. Thakurdwara, which borders the unhealthy portion of the Naini Tal district, has suffered proportionately far more than any other tahsil.

Migration is negligible. The decrease in emigrants may be partly due to the later date of the Census, since periodic cultivators in the Tarai begin to return to their homes at the end of the cold weather.

(11) *Shahjahanpur*.—This district shows a very big decline. The two northerly tahsils,

Shahjahanpur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	839,115	486	-11.3
Shahjahanpur ..	242,215	615	-8.5
Jalalabad ..	159,253	492	-8.3
Tilhar ..	222,708	534	-11.9
Pawayan ..	214,939	364	-15.5
Population.	1921.	1911.	Variation.
Actual ..	839,115	945,775	-106,660
Immigrants ..	73,582	98,839	-24,757
Emigrants ..	98,934	134,479	-35,538
Natural ..	864,467	981,908	-117,441

Tilhar and especially Pawayan, which runs up as a wedge between the Pilibhit and Kheri districts, bear the brunt of the loss. In the previous decade Pawayan increased very greatly while the rest of the district decreased. It is also the tahsil with much the lowest density. The demographic phenomena of Shahjahanpur are therefore the same as those of other semi-submontane districts.

Migration is not important. Both immigrants and emigrants have decreased more or less proportionately.

APPENDIX A.

(12) *Farrukhabad.*—The decrease of population is little more than the normal percentage of the decade and is fairly evenly distributed. Kaimganj however shows a surprising increase of 14 per thousand. I can suggest no reason for this.

The figures of migration call for no comment.

Farrukhabad district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	856,633	509	-4.8
Kanauj ..	88,957	495	-6.7
Chhibramau ..	183,582	45.4	-6.8
Sadr tahsil ..	229,599	680	-5.7
Kaimganj ..	171,422	470	+1.4
Aligarh ..	77,973	428	-6.6
Population.	1921.	1911.	Variation
Actual ..	856,633	900,022	-43,389
Immigrants ..	90,840	108,169	-17,329
Emigrants ..	89,103	110,015	-20,907
Natural ..	848,891	901,868	-52,977

(13) *Etawah.* The district has the reputation of being healthy, and it has suffered less loss of population than its neighbours, and than in 1911. The loss is fairly evenly distributed except that Bharthana is practically stationary. This tahsil was found in 1911 to have decreased more than twice as much as any other tahsil. Similar vicissitudes have been observed in a large number of districts.

Etawah district and tahsils	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	733,532	434	-3.5
Etawah ..	210,925	495	-4.2
Bharthana ..	179,251	431	-2
Bidhuna ..	171,666	397	-4.2
Auraiya ..	171,690	413	-5.2
Population.	1921.	1911.	Variation
Actual ..	733,533	760,121	-26,589
Immigrants ..	70,394	95,726	-25,332
Emigrants ..	53,968	79,966	-25,978
Natural ..	717,188	744,361	-27,233

5. INDO-GANGETIC PLAIN, CENTRAL.

(1) *Cawnpore.*—The population is almost stationary; but this is due to a balance of very different variations in different tahsils.

Cawnpore district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,148,664	485	+6
Akbarpur ..	144,407	390	-2.2
Bilhaur ..	173,778	446	-8.1
Bhognipur ..	140,639	371	+5.0
Cawnpore ..	363,858	965	+9.1
Derapur ..	155,761	386	-5.6
Ghatampur ..	150,221	352	-2.9
Population.	1921.	1911.	Variation.
Actual ..	1,148,664	1,143,286	+5,378
Immigration ..	141,558	153,441	-11,883
Emigration ..	101,296	125,975	-24,679
Natural ..	1,108,402	1,114,820	-6,418

Cawnpore itself—thanks to the city—and Bhognipur show large increases. Bilhaur and to a smaller extent Derapur, the north-easterly tahsils, show large decreases. The variations are difficult to account for, though the growth of the headquarters tahsil was to be expected. In 1911 the district, and especially the city, declined seriously (district 93 and Cawnpore tahsil 125 per thousand). But I have more than a suspicion that the figures in that year were inaccurate.

Migrants of both kinds, but especially emigrants, are fewer than they were. This in spite of epidemics is perhaps rather surprising in the case of immigrants. But the city has now a large element of settled labour and therefore of labourers who though of outside origin are homebred.

(2) *Fatehpur*.—The decrease of population is

Fatehpur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	652,392	397	-3.6
Fatehpur ..	164,039	429	-7.5
Khajurha ..	190,788	371	-1.4
Ghazipur ..	95,468	336	+1.8
Khaga ..	212,097	438	-5.0
Population.	1921.	1911.	Variation.
Actual ..	652,392	676,939	-24,547
Immigrants ..	47,605	45,644	+1,961
Emigrants ..	46,442	62,212	-15,770
Natural ..	651,229	698,507	-42,278

the normal percentage for the decade, losses in Fatehpur and Khaga tahsils being partially balanced by a gain in Ghazipur. Ghazipur also increased, while the rest of the district was decreasing, in 1911. The phenomenon, together with the increase of immigrants and decrease of emigrants, is probably connected with the introduction of canals at the beginning of the century. Greater agricultural facilities have attracted labour and induced emigrants to return from Cawnpore and elsewhere.

(3) *Allahabad*.—Losses have been slightly above normal, but are mainly concentrated

Allahabad district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,404,445	491	-4.3
Allahabad ..	308,652	396	-7.1
Sirathu ..	122,992	519	-3.9
Manjhanpur ..	129,639	473	-1.1
Soraon ..	173,639	648	-5.1
Phulpur ..	156,547	542	-5.4
Handia ..	167,114	563	-3.5
Karchhana ..	129,915	496	+1.8
Barah ..	54,829	212	-4.2
Meja ..	161,218	244	-4.9
Population.	1921.	1911.	Variation.
Actual ..	1,404,445	1,467,136	-62,691
Immigrants ..	60,021	96,985	-36,964
Emigrants ..	117,717	135,203	-17,486
Natural ..	1,402,141	1,505,354	-113,213

in the portion of this large district north of the Ganges—Allahabad, Soraon, and Phulpur: the first named has suffered most owing to the decay of its unenterprising city. Karchhana as in 1911 shows an increase. The other two trans-Jamna tahsils, Barah and Meja, in density and otherwise resemble the districts of the plateau, and have declined in conformity with that tract.

Migration is negligible. Immigrants are fewer than in 1911 by about 35 per cent., partly perhaps because at the time of census the Legislative Council was busy in Lucknow.

(4) *Lucknow*.—Population as in the last decade has decreased more than would be

Lucknow district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	724,344	749	-5.2
Lucknow ..	424,482	1,179	-4.9
Mohanlalganj ..	132,380	485	-5.4
Malihabad ..	167,482	501	-4.1
Population.	1921.	1911.	Variation.
Actual ..	724,344	764,411	-40,067
Immigrants ..	102,924	140,650	-37,726
Emigrants ..	77,937	97,535	-19,598
Natural ..	699,357	721,296	-21,939

expected. The decline is evenly distributed, though Malihabad which lost most in 1911 has lost least now. There is a surprising fall in the number of immigrants—surprising because at the time of census the Council was just about to sit, and the city was full of politicians, Government servants, and placemen. Lucknow though progressing politically is decaying in all other ways and evidently politics does not feed as many mouths as one imagined.

(5) *Unao*.—The district has been decimated, losses being most severe in Safipur and Purwa. The headquarters tahsil which suffered most in the last decade, has now come off lightest. Unao had declined by 67 per thousand in 1911, and as the figures show the proportion of this decline due to emigration is negligible: though the district is known to supply a quantity of labour to the Cawnpore Mills.

Unao district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	819,128	458	-10.1
Unao ..	170,459	425	-7.8
Safipur ..	189,590	475	-11.1
Purwa ..	299,048	484	-12.0
Mohan (Ifasanganj) ..	220,031	505	-8.2
Population.	1921.	1911.	Variation.
Actual ..	819,128	910,915	-91,787
Immigrants ..	87,838	55,827	-17,989
Emigrants ..	75,748	95,471	-19,728
Natural ..	857,038	950,559	-93,521

(6) *Rae Bareilly*.—Losses have been heavy, the south-easterly tahsil, Salon, having suffered least. Maharajganj has suffered most as in 1911. Emigration has decreased proportionately much less than immigration.

Rae Bareilly district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	936,403	537	-7.9
Rae Bareilly ..	206,211	500	-8.3
Dalmau ..	247,976	525	-8.3
Maharajganj ..	240,779	518	-8.7
Salon ..	241,437	519	-6.3
Population.	1921.	1911.	Variation.
Actual ..	936,403	1,016,864	-80,461
Immigrants ..	46,993	65,861	-18,868
Emigrants ..	79,591	97,026	-17,435
Natural ..	969,001	1,048,029	-79,028

(7) *Sitapur*.—Population has decreased largely only in the north-easterly portion of the district, Sitapur and Biswan. Misrikh in the south-east is almost stationary. Migration of both kinds has declined considerably.

Sitapur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,089,481	484	-4.3
Sitapur ..	285,839	501	-7.5
Biswan ..	271,795	481	-5.6
Sidhauli ..	276,026	550	-2.6
Misrikh ..	256,831	418	- .9
Population.	1921.	1911.	Variation.
Actual ..	1,089,481	1,138,996	-49,515
Immigrants ..	62,168	85,144	-22,986
Emigrants ..	68,244	101,091	-32,847
Natural ..	1,096,567	1,154,943	-59,876

(8) *Hardoi*.—Losses have been normal, and are concentrated mainly in Bilgram, which

Hardoi district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,084,410	465	-3.3
Hardoi ..	296,376	467	-1.1
Shahabad ..	252,581	466	-3.4
Bilgram ..	274,382	460	-6.4
Sandila ..	261,121	470	-1.2
Population.	1921.	1911.	Variation.
Actual ..	1,084,410	1,121,248	-36,838
Immigrants ..	54,798	73,044	-18,246
Emigrants ..	88,349	110,815	-22,466
Natural ..	1,117,961	1,169,019	-41,058

declined also, while the district as a whole was growing in population, during the previous decade. The cause of internal variation is hard to seek, for the district is remarkably uniform in character and density.

(9) *Fyzabad*.—There is a small increase of population; the increase is considerable in the

Fyzabad district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,171,980	677	+1.5
Akbarpur ..	349,594	646	+2.9
Bikapur ..	286,531	614	+ .1
Fyzabad ..	274,239	764	-1.6
Tanda ..	261,626	717	+4.0
Population.	1921.	1911.	Variation.
Actual ..	1,171,980	1,154,109	+17,871
Immigrants ..	61,289	91,397	-30,708
Emigrants ..	102,638	139,264	-36,616
Natural ..	1,213,279	1,201,366	+11,913

Tanda tahsil. Only the headquarters tahsil has lost, and this is due to the decay of the city, which is dealt with in Chapter II. It lost very heavily in the previous decade, when the district as a whole declined by 58 per thousand. Tanda is the most easterly tahsil, and borders the growing districts of the Gorakhpur division.

The very big decline of both kinds of migration is surprising.

(10) *Sultanpur*.—Losses are severe only in Amethi, and are least in the easterly tahsil

Sultanpur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,003,912	586	-4.3
Sultanpur ..	319,645	629	-5.6
Amethi ..	189,266	517	-7.8
Musafrkhana ..	243,064	612	-3.7
Kadipur ..	251,937	570	-2.8
Population.	1921.	1911.	Variation.
Actual ..	1,003,912	1,048,524	-44,612
Immigrants ..	60,242	82,841	-22,599
Emigrants ..	95,593	112,563	-16,970
Natural ..	1,039,263	1,078,246	-38,983

Kadipur. The less serious decrease of 1911 was similarly distributed. Emigrants have not declined in proportion to the decline of population, so that emigration is evidently on the increase. The district sends a number of labourers to the tea gardens of Dehra Dun.

(11) *Partabgarh*.—The big decrease of 5 per cent. is evenly distributed. The migration figures are of doubtful significance.

Partabgarh district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	855,180	593	-5.0
Partabgarh ..	294,707	682	-4.8
Kunda ..	298,542	549	-5.1
Patti ..	261,881	561	-4.9
Population.	1921.	1911.	Variation.
Actual ..	855,180	699,973	-44,843
Immigrants ..	54,949	66,918	-11,969
Emigrants ..	84,052	103,799	-18,747
Natural ..	884,233	935,854	-51,641

Though 12,000 fewer immigrants were found than in 1911, there are 20,000 more than in 1901, and the figures of the former year can hardly have been correct. The nature of this increased immigration (since 1901) is not clear. The excess of migration over immigration represents the flow of labour to Dehra Dun and to Bengal and Assam.

(12) *Bara Banki*.—Losses here have been very uneven. Haidargarh south of the Gumti

Bara Banki district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,029,954	5.6	-5.0
Ramsnabighat ..	328,749	55.0	-3.0
Nawabganj ..	293,862	648	-6.0
Fatehpur ..	289,619	559	-7.6
Haidargarh ..	177,724	611	-1.1
Population.	1921.	1911.	Variation.
Actual ..	1,029,954	1,083,867	-53,913
Immigrants ..	48,180	61,373	-13,193
Emigrants ..	73,692	95,792	-22,100
Natural ..	1,055,466	1,118,286	-62,820

has lost only 11 per thousand. Fatehpur which borders the north-easterly portion of Sitapur (which portion has exceptional losses) has lost 76. Migration of both kinds has decreased.

6. CENTRAL INDIA PLATEAU.

(1) *Jhansi*.—This district is subject to very violent fluctuations, and has lost rather more

Jhansi district and tahsils.	Population.	Density.	Percentage of variation 1911-1921.
District Total ..	606,499	167	-10.9
Jhansi ..	149,953	297	-10.2
Mau ..	97,443	222	-6.6
Garautha ..	76,492	164	+5.3
Moth ..	50,259	180	-8.6
Lalitpur ..	138,513	131	-13.1
Mahroni ..	93,909	106	-23.3
Population.	1921.	1911.	Variation.
Actual ..	606,499	680,688	-74,189
Immigrants ..	83,375	103,653	-20,278
Emigrants ..	106,028	72,414	+33,609
Natural ..	614,147	614,449	-302

than it did in 1901, and almost exactly what it gained in 1911. Mahroni, the tahsil with the lowest density and with the worst communications, appears to have declined by the prodigious figure of 233 per thousand (having increased by 178 in 1911). A large portion of this decline is however unreal; the labouring classes troop off to cut the Malwa crops in the second half of March, returning when the harvest is over. In real loss there is probably little to choose between the two tahsils of the Lalitpur sub-division, which were terribly ravaged by the influenza epidemic. There is a strange increase of population in Garautha, which is favourably situated in relation neither to communications nor to canals.

Immigrants have greatly decreased, which takes practically all its wives from the surrounding states, suffered so grievously in 1918. Emigration is mainly periodic and the increase is largely due to the later date of the census.

(2) *Jalaun*.—The population is almost stationary, but this is due to a big increase in

Jalaun district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District Total ..	405,459	262	+2
Orai ..	65,449	213	+11.9
Kalpi ..	76,306	188	-4.6
Jalaun ..	161,408	386	-5
Kunoh ..	102,276	287	-1.8
Population.	1921.	1911.	Variation.
Actual ..	405,459	404,775	+684
Immigrants ..	41,047	61,863	-10,816
Emigrants ..	29,881	40,050	-10,169
Natural ..	394,273	392,952	+1,311

Orai, which lost most in 1911. Kalpi which alone has lost seriously was alone in gaining appreciably in the previous decade. Fluctuation is therefore evidently the order of things here as in Jhansi. Orai, it may be noticed, is the most favourably situated tahsil in relation both to communications and to canals.

Migration has varied with the population.

(3) *Hamirpur*.—Losses have been fairly severe and are heaviest in Rath, which though

Hamirpur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	440,245	192	-5.4
Hamirpur ..	76,665	204	-3.6
Rath ..	112,819	195	-8.7
Kulpahar ..	100,958	181	-6.9
Mahoba ..	62,903	191	-1.0
Maudaha ..	87,400	193	-3.7
Population.	1921.	1911.	Variation.
Actual ..	440,245	465,223	-24,978
Immigrants ..	41,091	53,260	-12,169
Emigrants ..	71,090	71,603	-513
Natural ..	465,234	483,571	-18,337

it has a canal, has practically no communications. Rath also lost, while the district generally gained, in 1911. The decline is far less serious than elsewhere in Mahoba, where alone in the district communications are fairly good.

Proportionately to the population there are appreciably more emigrants than before. Emigration is as in Jhansi largely periodic, and the proportionate increase is probably due to the later date of the census.

(4) *Banda*.—The rather heavy decrease is unevenly distributed, and it is difficult to

Banda district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	613,114	207	-6.7
Banda ..	94,406	221	-2.9
Pailani ..	76,569	211	-4.7
Haberu ..	76,697	208	-7.8
Kamasin ..	70,122	196	-13.9
Mau ..	65,435	205	-4.1
Karwi ..	89,488	175	-1.5
Badausa ..	72,553	223	-9.4
Girwan ..	75,944	225	-9.9
Population.	1921.	1911.	Variation.
Actual ..	613,114	657,237	-44,123
Immigrants ..	41,196	42,927	-1,731
Emigrants ..	63,706	74,394	-10,688
Natural ..	612,625	688,704	-76,079

account for this distribution, though Karwi and Banda, with the best communications, have suffered least. Kamasin has lost enormously.

Emigrants are fewer, and immigrants more numerous, than they would be if they had varied with the population. Distress in the neighbouring states for some time before the census had driven numbers of the labouring classes over the British border.

7. EAST SATPURAS.

Mirzapur.—The population of the district as a whole is stationary, but this is only so

Mirzapur district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	724,183	166	— .1
Mirzapur ..	307,180	259	+ .3
Chunar ..	182,456	325	+8.6
Robertsganj ..	154,552	95	—4.6
Dudhi ..	79,995	81	— .7
Population.	1921.	1911.	Variation.
Actual ..	724,183	724,801	—618
Immigrants ..	42,325	41,962	+363
Emigrants ..	79,512	68,196	+11,316
Natural ..	761,470	751,035	+10,435

on a balance of very different factors. The northern portion, which is properly a portion of the Eastern Plain, shows an increase in common with the latter. The southern portion, Robertsganj and Dudhi, which is the true East Satpuras and in character resembles the Plateau, shows a decrease. The decrease would be considerably greater in the case of Dudhi but for an influx of refugees from the neighbouring states, in which distress had been prevailing for some time before the census.

This influx explains the unusual phenomenon of a slight increase of immigrants. A large proportion of these must be temporary. Emigration has always been popular in Mirzapur, and has increased considerably.

Conditions are completely reversed since 1911, when Robertsganj and Dudhi gained largely in population while Mirzapur and Chunar lost. In that year also 27 per cent. fewer immigrants were found than in 1901.

8. SUB-HIMALAYA, EAST.

(1) *Gorakhpur.*—The district in common with the rest of the natural division has gained

Gorakhpur district and tahsils.	Population	Density.	Percentage of variation, 1911-1921.
District total ..	3,266,830	723	+2.1
Gorakhpur ..	554,934	867	+5.9
Bansgaon ..	440,898	794	+2.8
Hata ..	49,995	862	+4.6
Deoria ..	498,265	856	—2.9
Padrauna ..	660,415	712	+1.4
Maharajganj ..	609,323	492	+1.1
Population.	1921.	1911.	Variation.
Actual ..	3,266,830	3,201,180	+65,650
Immigrants ..	89,236	151,552	—62,316
Emigrants ..	181,169	196,324	—15,155
Natural ..	3,208,763	3,185,952	+22,811

appreciably in population. It is highly congested. And the curious fact that, if the Deoria tahsil be excluded, increase has varied in direct proportion to the density has been noticed in the body of the report. The northern tahsil, Maharajganj, which is the least developed and also the most unhealthy, has not gained to anything like the same extent as the highly developed tahsils of Gorakhpur and Hata, and this district affords the most striking support to the argument that variation, in the last decade at any rate, has depended on conditions of health and on nothing else.

The exceptional decrease in Deoria was paralleled in 1901.

Emigrants have decreased slightly and immigrants enormously. The reasons are not apparent, but the figures are of

no importance in a population of 3½ millions.

(2) *Basti.*—There is a bigger increase of population in this congested district than any-

Basti district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,925,228	667	+5.2
Domariaganj ..	841,982	584	+11.7
Bansi ..	429,947	701	+3.5
Haraiya ..	841,438	675	+2.3
Basti ..	889,649	720	+3.4
Khalilabad ..	422,313	759	+6.1
Population.	1921.	1911.	Variation.
Actual ..	1,925,228	1,830,421	+94,807
Immigrants ..	63,757	85,546	—21,789
Emigrants ..	99,740	137,279	—37,539
Natural ..	1,961,311	1,882,164	+79,067

where in the province. The distribution of the increase is not easily explicable: the highest proportions are found in Domariaganj and Khalilabad, at opposite ends of the district. Domariaganj lost most in 1911. It borders the Utraula tahsil of the Gonda district, which has also gained very greatly. The balance of emigrants over immigrants is greater than it appears to be. Overseas emigration is not included in these figures, and there may be, as Mr. Blunt alleged in 1911, a certain amount of exodus to Nepal.

(3) *Gonda*.—Here as in Basti population has increased considerably, the increase being mainly concentrated in the huge tahsil of Utraula. The headquarters tahsil is stationary.

Migration is negligible, though there may be some unrecorded emigration to Nepal.

Gonda district and tahsils.	Population	Density.	Percentage of variation, 1911-1921.
District total ..	1,473,098	524	+4.3
Gonda ..	896,861	641	—6
Tarabganj ..	854,066	567	+3.4
Utraula ..	723,171	461	+7.7
Population.	1921.	1911.	Variation.
Actual ..	1,473,098	1,412,212	+60,886
Immigrants ..	73,063	93,481	—21,418
Emigrants ..	75,733	95,280	—19,547
Natural ..	1,476,768	1,414,011	+62,757

(4) *Bahraich*.—This district with a gain of 17 per thousand occupies a position midway between Gonda (gain 43 per thousand) and Kheri (loss 48 per thousand). The transition between gain and loss is more smooth when examined by tahsils, Nighasan, the easterly tahsil of Kheri, losing 14 and Nanpara, the westerly tahsil of Bahraich, losing 4.

Migration is negligible, though some population may possibly be lost to Nepal.

Bahraich district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	1,065,377	403	+1.7
Bahraich ..	404,644	435	+2.3
Kalsarganj ..	346,618	508	+2.9
Nanpara ..	314,115	305	—4
Population.	1921.	1911.	Variation.
Actual ..	1,065,377	1,047,677	+17,700
Immigrants ..	60,021	77,178	—27,157
Emigrants ..	25,499	33,890	—8,391
Natural ..	1,040,855	1,004,389	+36,466

9. INDO-GANGETIC PLAIN, EAST.

(1) *Benares*.—There has been a small increase of population, the percentage in the eastern being as in 1911 double that in the western tahsil. Emigrants have increased and immigrants have decreased: the former now outnumber the latter by nearly two to one. In 1901 immigrants were appreciably the more numerous. Variation in immigration is however probably due merely to accidents of pilgrimage.

Benares district and tahsils.	Population.	Density.	Percentage of variation, 1911-1921.
District total ..	901,312	899	+1.8
Benares ..	682,184	1,138	+1.4
Ohandauli ..	239,128	568	+2.9
Population ..	1921	1911	Variation.
Actual ..	901,312	885,442	+15,870
Immigrants ..	63,135	99,443	—36,308
Emigrants ..	119,263	106,958	+12,305
Natural ..	957,440	892,957	+64,483

(2) *Jaunpur.*—Population of the district as a whole is stationary, but a gain in the

Jaunpur district and tahsils.	Population.	Density.	Percentage of variation, 1911—1921.
District total ..	1,155,105	745	—1
Jaunpur ..	251,726	893	+1 3
Maraha ..	285,169	785	—2 3
Machhlisahar ..	217,596	633	—3 7
Khutaham (shahganj) ..	255,428	708	+1 8
Kirakat ..	195,186	808	+2 6
Population ..	1921	1911	Variation.
Actual ..	1,155,105	1,156,254	—1,149
Immigrants ..	59,579	74,039	—14,460
Emigrants ..	139,229	159,137	—19,908
Natural ..	1,234,755	1,241,352	—6,597

northern and eastern tahsils is balanced by a loss in the south. Kirakat in the east gains most, and was alone in showing an increase in 1911. It lost more than any other tahsil however in 1901. Machhlisahar, where the density is lowest, loses most.

Migration has decreased proportionately to the decrease of population.

Emigrants largely exceed immigrants: there is a considerable flow of labour to Bengal.

(3) *Ghazipur.*—Population has decreased slightly, the losses here being concentrated in the East where the density is lowest. The eastern tahsils also suffered severely in 1911. Immigrants have increased and emigrants decreased, reversing the position of 1911.

Ghazipur district and tahsils.	Population.	Density.	Percentage of variation, 1911—1921.
District total ..	832,289	598	—9
Ghazipur ..	248,244	628	+6
Muhammadabad ..	191,139	603	—3 2
Zamanich ..	212,555	552	—1 9
Saidpur ..	180,271	611	+9
Population ..	1921	1911	Variation.
Actual ..	832,289	830,725	—7,436
Immigrants ..	49,177	40,450	+8,727
Emigrants ..	117,614	148,422	—30,808
Natural ..	900,720	947,697	—46,977

There is still however a large balance in favour of emigration, as is the case throughout this division: from which there is a constant drain of labour to Bengal.

(4) *Ballia.*—Population has declined principally in the East. Rasra in the West is

Ballia district and tahsils.	Population.	Density.	Percentage of variation, 1911—1921.
District total ..	831,009	680	—1 7
Ballia ..	331,311	743	—2 4
Rasra ..	252,295	598	—2
Bansdih ..	247,403	697	—2 3
Population ..	1921.	1911.	Variation.
Actual ..	831,009	845,766	—14,757
Immigrants ..	83,350	81,649	+1,701
Emigrants ..	106,895	135,818	—28,923
Natural ..	904,494	949,935	—45,441

almost stationary. Rasra suffered least also in 1911, but bore the whole of the losses in 1901. Emigrants, though still far more numerous than immigrants, have decreased markedly while immigrants have increased.

(5) *Azamgarh*.—This densely populated district has increased throughout, but especially in the south-west. The increase follows considerable losses in the last two decades. Both emigrants and immigrants are fewer, the former by nearly 25 per cent.

Azamgarh district and tahsils.	Population	Density.	Percentage of variation, 1911—1920.
District total ..	1,528,657	691	+2.4
Nizamabad ..	247,010	789	+1
Deogaon ..	234,098	608	+4.6
Mahul ..	321,228	728	+5.1
Sagri ..	283,522	669	+1.3
Muhammabad ..	247,318	691	+2.7
Ghosi ..	245,481	669	+1
Population.	1921.	1911.	Variation.
Actual ..	1,528,657	1,492,818	+35,839
Immigrants ..	58,548	63,870	—10,322
Emigrants ..	151,689	200,019	—48,380
Natural ..	1,621,748	1,623,967	—2,219

10. THE STATES.

(1) *Rampur*.—There is a very heavy drop in the population, the losses of the tahsil with the lowest density, Bilaspur, amounting to 262 per thousand. The apparent decrease of emigration is probably due to the unhealthiness (and consequent high mortality) of the tract to which most of the emigrants go.

Rampur State and tahsils.	Population.	Density	Percentage of variation, 1911—1921.
State total ..	453,607	504	—14.6
Hazur ..	164,869	925	—7.9
Tanda ..	21,392	497	—12.7
Suar ..	64,571	427	—24.6
Bilaspur ..	48,392	237	—26.2
Milak ..	81,657	523	—3.4
Shahabad ..	72,746	495	—11.5
Population.	1921.	1911.	Variation.
Actual ..	453,607	531,217	—77,610
Immigrants ..	41,291	60,456	—19,165
Emigrants ..	47,444	62,392	—14,838
Natural ..	459,760	533,043	—73,283

(2) *Tehri*.—Population has increased substantially, and it is clear that the influenza wave did not penetrate seriously into this inaccessible state. Migration figures are practically unchanged. Immigrants are mainly pilgrims, and emigrants are "periodic" labourers in the Dehra Dun district.

Tehri-Garhwal State and tahsils.	Population.	Density.	Percentage of variation, 1911—1931.
State total ..	318,414	76	+5.8
Tehri tahsil ..	318,414	76	+5.8
Population.	1921.	1911.	Variation.
Actual ..	318,414	300,819	+17,595
Immigrants ..	4,631	4,694	—63
Emigrants ..	7,860	6,952	+408
Natural ..	321,143	303,077	+18,066

(3) *Benares*.—There is a small increase of population on the same scale as in surrounding

British territory. Migration is unimportant. The figure for emigrants is unnaturally low, and is obviously inaccurate. A big proportion of emigrants will have left their homes before the State was created, or before its creation was a familiar fact: and will have returned themselves as born in the Mirzapur or Benares districts.

Beparos State and tahsils.	Population.	Density.	Percentage of variation, 1911—1921.
State total ..	362,860	417	+1.4
Gyanpur.. ..	273,778	417	+1.4
Chakia	76,838		
Ramnagar	12,244		
Population.	1921.	911.	Variation.
Actual	362,860	857,838	+5,022
Immigrants ..	29,503	Figures for 1911 are not available.	
Emigrants ..	3,156		
Natural.. ..	336,518		

APPENDIX B.

Note by the Rev. Ray Smith, Honorary Secretary, Representative Council of Missions, on the Missionary Societies and Christian Churches of the United Provinces.

In nearly every district of the United Provinces, Christian Missions and Churches are at work. But in many districts the occupation is so sparse that only a small portion of the people are able to get an adequate idea of the teachings of Christ. Generally speaking the North-West end of the provinces, taking Cawnpore as the dividing point, is much better occupied than the lower end. Not only are there more societies working in the upper end but they are better manned and more successful. There are 21 societies representing Great Britain, America, Sweden, and Australia. These societies employ about 140 foreign men and 240 foreign women with some 2,000 Indian men and 1,600 Indian women.

Missions and Churches conduct their work in several well defined ways. The Evangelistic and pastoral work is concerned with the proclamation of the Gospel to as many as can be reached and the building up in doctrine and life of the converts. About two-fifths of the foreign missionary force and four-fifths or more of the Indian Staff is engaged in this work. They are instructing upward of 250,000 converts living in over 12,000 towns and villages.

The educational work is a distinct contribution to the sum total of school work done in the provinces by Government and other agencies. About 60 foreign men and 90 foreign women with 480 Indian Christian men and 500 women are giving instruction in over 800 schools and colleges. In the College classes of six institutions they are instructing about 1,000 men and some 40 women. About 8,000 boys and 2,800 girls are being taught in the classes of the secondary schools while some 10,000 boys and over half as many girls are in the primary schools.

The medical work of Missions does much to alleviate the suffering in the provinces, especially among the women. Three foreign men and 16 foreign women with 25 Indian men and 100 Indian women are engaged in this work and treat annually about 150,000 people. A valuable work is being done by Missions in several leper asylums and institutions for the blind and other unfortunates.

The Indian Christian community is decade by decade increasing not only in numbers but also in importance and influence. Larger numbers are finding their way into places of responsibility in Government and in Railway service. In one small district there were recently a deputy collector, a head master of Government High School, a deputy inspector of vernacular schools, a station master, and a civil surgeon, all Indian Christians. There is a constant improvement of the Indian Christian community in economic status. This is true even of the converts from the outcastes, especially where they have entered occupations under the stimulus of co-operative credit societies linked up to the Christian Central Bank in Lucknow. The trade schools have helped the Christian young men to become skilled workmen and artisans. Their services in this line seem to be increasingly appreciated in the industrial centres. Two Business Training schools are enabling an increasing number of Indian Christian youths to become efficient clerks and office helps. It is now very common to find Indian Christians engaged in business for themselves. In the matter of education considerable progress has been made during the decade. While the large influx from among the depressed classes may have reduced the percentage of literacy the fact remains that the older section of the community are not only more literate than before but a very much larger per cent. of those who are literate are far advanced in education and culture.

LIST OF MISSIONS.

American Presbyterian Mission.
 Baptist Missionary Society.
 Christian Women's Board of Missions.
 The Church Missionary Society.
 The London Missionary Society.
 The Lucknow Diocesan Board of Missions, or S. P. G.
 The Methodist Episcopal Church.
 Salvation Army.
 The Wesleyan Missionary Society.
 Woman's Union Missionary Society.
 North-West India Union Mission of Seventh Day Adventists.
 Zenana Bible and Medical Mission.
 Churches of Christ Mission.
 The Reformed Presbyterian Mission.
 The Pilgrims' Mission, or Boys' Christian Home Mission.
 The National Missionary Society.
 Bazaleel Evangelistic Mission.
 The Gwalior Presbyterian Mission.
 Reformed Episcopal.
 Tanakpur Bible and Medical Mission.
 The Tehri Unjamani Basharat.
 The India Conference, General Council Assemblies of God.
 The Swedish Baptist Mission.
 The Australian Methodist Mission.

APPENDIX C.

The depressed classes of the Kumaun Hills.

The community shown in Table XIII as "Hill Depressed Classes" is better known to the world as the "Dom" community. The more enlightened members of it object to being called "Doms" because—

- (1) The word has come to be used, in Kumaun, as a term of contempt.
- (2) Its use suggests affinity with the scavenger "Doms" of the East of the province, with whom they deny any connection.

The objection is one which can fairly claim sympathy. The removal of any obstacle to the growth of self-respect among a community must be a gain to the State. And no one who has observed the burly physique of the Doms of Gorakhpur and the slight build of the hill Doms could believe that the two tribes have anything in common, though Crooke appears to imply that they are an identical caste.

2. I was asked to disallow the use of the term "Dom" in the census schedule. It was said that the whole community had broken up into so-called sub-castes, and that the sub-castes were really true castes, "Dom" being only a general name for the aggregate of these. I did not find myself able to accede to this request. It was known that at any rate the majority of hill Doms had "sub-caste" names by which they were generally designated. But it was not certain that all had such names. Moreover, the "sub-castes" were not accurately known, variant names for the same sub-caste were believed to be numerous, and the common practice of using titles of place or of mere occupation after a man's name would, if no safeguards were adopted, complicate the classification of the entries in the schedules.

I therefore directed that for members of the Hill Depressed Classes the entry in column 8 should be "Dom" as a numerator and the sub-caste returned, if any, as a denominator: thus Dom Dom.
Orh, Koli. I hoped that by classifying the resulting returns it might be possible to prepare an authoritative list of the depressed castes or sub-castes and to enable the next Census Superintendent to record these only, dispensing with the use of the term to which objection is taken.

3. The event has proved that my caution was justified. There are, so far as my enquiries show, 30 authenticated "Dom" sub-castes: no fewer than 204 sub-caste names were found in the schedules. Of these, 43 proved to be variants of one or other of the 30 authenticated sub-caste names: a few were merely occupational titles, such as "Dandiya" "Randi." Most of the rest were place names. A few were quite unintelligible.

At the same time I think that my successors will now have sufficient material to enable them with safety to dispense with the word "Dom" and to allow the "sub-caste" name only to be recorded in the schedule. There will always be a considerable category of "others:" but we know with reasonable accuracy what the organised "sub-castes" are, and that these are really true castes, the word "Dom" being a general name for a community of caste groups that are regarded by the Brahmans and Rajputs of the Hills as socially inferior to themselves.

4. To help me in the classification of this community I had inquiries made, during the currency of the census, into its origin and constitution. Unfortunately, owing to the period of political disquiet and administrative change through which the province was passing at the time, these inquiries could not be as extensive or as thorough as I should have wished. They might well be pursued further by anyone with the necessary interest and opportunity. It seemed to me, when I embarked upon them, that it might be found that the "Doms" were originally an undifferentiated tribe, and had in course of time broken up into occupational groups which had become castes: and that if such were found to be the case, the process of disintegration might furnish a comparatively recent replica, on a small scale, of the process by which the plains Sudras of the Hindu Scriptures have broken up into the horde of occupational castes that we now know.

5. It cannot be said with certainty that the "Doms" were originally an undifferentiated tribe. Crooke appears to be of opinion that they were: he quotes a popular belief that they are the relics of the original inhabitants of the country, and states that they are recognised locally as the descendants of the Dasyus of the Veda, who are supposed to have held Upper India before the advent of the Naga or Khasi race. As to all this I can discover no evidence: nor, so far as my inquiries go, is any reliable tradition extant as to the antiquity or history of the occupational groups. It is at least arguable that those sections of the people who took to trades regarded as degrading have been separated off into a socially inferior community and that the poor physique and dark colour generally observable in this community is due to relatively poor nutrition and excessive exposure.

6. Be this as it may, it is fairly certain that the castes—as they should be called, rather than sub-castes—are in origin occupational guilds: the process by which certain of them have lost their occupational character and become mere social units is a matter of living memory. Fifty years ago the Chanals were weavers. Cotton-growing has now been abandoned in the hills, and the Chanals are now mainly ploughmen. Similarly the Lohars of Gangoli and Chaugarkha were until recently iron smelters. The smelting of iron by their primitive methods ceased to be a business proposition, and most of them have also taken to agriculture. In both cases the loss of the caste occupation has in no way impaired the vitality of the caste.

7. If these facts appear to support certain theories as to the origin of caste in the plains, other facts illustrate the diversity of development in different places from origins probably similar. All inquiries confirm the existence of castes which are based on occupation graded in groups which are based on social precedence. There is nothing, I think, quite analogous to these groups in the plains. Moreover, the constitution of the groups is evidently not yet cut and dried. There are occasional local differences as to the group to which certain castes belong, and indeed there appear in some tracts to be six groups instead of the usual five.

In no respect is the diverse development from similar origins so remarkable as in the matter of marriage customs. No enquirer mentions any trace of exogamy. And endogamy within the caste appears to be unknown. There is however undoubted endogamy, sometimes within the group, sometimes as between the groups. But here also the custom varies with the locality. The most general rule seems to be that there is intermarriage between groups I and II (the groups are shown in detail at the end of this note), while the members of groups III, IV, and V intermarry indifferently within their several groups.

Dining rules follow those of marriage. There do not appear to be any caste panchayats, at any rate outside the towns. The unit for panchayats in the hills is the village, not the social community.

8. From the facts stated it will be seen that the caste system among the depressed classes of the hills is still in a very fluid state. I have said that the occupational sub-divisions are true castes rather than sub-castes. They are certainly not sub-castes of a true "Dom" caste, for the Doms as a whole have no sort of caste cohesion. A good case could be made out for holding that the true caste is rather what I have called the "group." But groups have not even names; and it is most reasonable, pending further developments, to find the caste of the depressed classes of the hills in what has hitherto been called the sub-caste, it being understood that the caste system among these people is neither wholly analogous to nor (so far) as rigid as that of the Hindus of the plains.

Below is given a list of the authenticated castes, with the traditional occupation of each, in the group arrangement most generally recognized—

	<i>Caste.</i>				<i>Traditional occupation.</i>
Group—I.	Agri	...	...	...	Ironsmiths.
	Lohar	...	...	...	Ironsmiths.
	Tamta	...	...	...	Coppersmiths.
	Tirwa	...	...	...	Sword and knife sharpeners.
Group—II.	Barhai	..	...	...	Carpenters.
	Bhul	...	...	...	Oil pressers.
	Bairi	...	...	...	Basket makers.
	Baura	...	...	...	Sack makers.
	Chawal	...	...	...	Shoe makers.
	Hankiya	...	...	...	Potters.
	Koli	...	..	...	Weavers.
	Orh	...	...	...	Masons.
	Ruria	...	...	...	Basket makers.
	Raj	...	...	...	Masons.
	Dhanik	...	...	...	Basket makers.
	Dhunia	...	...	...	Catechu makers.
	Jamoria	...	...	...	Cultivators.
Group—III.	Barai	...	...	...	Stone masons.
	Bakharia	...	...	...	Ploughmen and menials.
	Chunera	...	...	...	Turners
	Mochi	...	...	...	Shoe makers.
	Pahri	...	...	...	Watchmen.
	Dhobi	...	...	...	Washermen.
Group—IV.	Pauri	...	...	...	Potters.
	Anji	...	...	...	Tailors and Drummers.
	Darzi	...	...	...	Tailors.
	Doli	...	...	...	Tailors and Drummers.
Group—V.	Turi	...	...	...	Trumpeters.
	Hurkiya	...	...	...	Drummers.
	Badi	...	...	...	Dancers.

NOTE.—The Kelts of Jamsar Bawar is undoubtedly a caste belonging to this community, but appears to stand outside the group system. In occupation the Kelts corresponds to the Chamar of the plains.

Note on the market of Mau, a town in the Jhansi district, by B. V. Bhadkamkar, Esq., I.O.S.

MAU the headquarters of a tahsil in the Jhansi district is on the Jhansi-Manikpur line forty miles from Jhansi. It has a population of 12,554 and is a municipality.

The Mau market perhaps cannot strictly be described as rural, but the conditions prevailing there are certainly not very far removed from those generally associated with rural trade. Only its size is bigger than that of an ordinary rural market. It is the centre of a big trade in grain.

The weighmen form the first link in the chain of organization of the trade; next come the "arhatias" and lastly the traders who make purchases on their own account. These three divisions are made only for purposes of analysis and it is not to be supposed that a weighman for instance does not do business as an "arhatia" or a regular dealer.

Weighing dues are a feature of every market: historically they can be analysed into the rent paid to the zamindars for use of the land on which the bazar is held. Weighing dues have now come to be regarded as customary charges. In Mau the rights belong to Government who have entrusted them to the municipality to administer. The weighmen at Mau have to take licences and pay a monthly fee of Re. 1 or annual fee of Rs 12 to the municipality.

There are about thirty weighmen in Mau, twenty of them big ones, and there is keen competition among them. When the villagers come with their cart loads of grain to Mau, they are met just outside Mau by the touts of these weighmen: and unless they already know a weighman or an "arhatia" or a regular dealer to whom they want to go, they are captured by one or other of these touts and taken to the weighman for whom he is working.

These weighmen render many services to their clients for which no additional charge is made, e.g., they take the villager round to the "arhatias" and other dealers and try to effect a sale at the best market rate; if a good price cannot be made, they even stock the grain of their client for a day or two, or even up to a week, till such price can be fetched. Of course it is only the big weighmen who have got their own godowns and can do this.

The weighing dues charged are —

For grain	..	..	..	..	..	..	2 pies per rupee.
For ghoe	..	..	..	..	..	..	1 anna per maund.

The busy season is after the kharif and rabi harvests—November, December, half of January, part of February, March and April.

The agricultural produce that comes to Mau is chiefly jwar, gram, wheat, cotton, til, etc., and it comes from the Mau, Garotha and Moth tahsils, though in the case of the last tahsil, the market at Chirgaon is nearer. Villagers get a better price at Mau, partly because Mau is a bigger market than Chirgaon, and partly because the railway booking facilities at Mau are better than at Chirgaon.

The villagers of the surrounding native states also bring their produce to Mau if there is no restriction of export in the states concerned.

The traders at Mau are most of them local, but there are also a few branches of firms established at Bombay or Cawnpore. These branches carry on business in accordance with instructions received from their head firms. The local traders have also their agents or what we may call correspondents through whom they keep in touch with other markets.

As stated above, a few of these carry on business purely as "arhatias." The majority of their customers are in the nature of things outsiders who sometimes come in person to Mau and sometimes send orders by post. The "arhatias" buy the corn at the prevailing market rate and charge from 12 annas to Re. 1 per cent. as *arhat* commission.

But the majority of the traders combine purchase on commission with purchase on their own account, and stock the grain in their godowns till they receive an order, when they sell it. The gross profits of these persons have to provide for the interest on the capital locked up, charges of handling, storing and management, besides including real profits. They make large profits if the prices go up suddenly: and suffer big losses if the prices fall.

The major part of the business of these traders is wholesale, though some of them also carry on business as retailers. The rate of net profit is from $\frac{1}{2}$ to $\frac{1}{4}$ anna in the rupee (wholesale) and twice as much retail.

Payments are made partly in cash and partly in *hundis*. There are some houses where business in cashing hundis is carried on during the busy months, and a regular rate of exchange is established; and though the hundis are generally at a discount (4 annas to 1 Re. per cent.), they are also sometimes above par if there is a great demand for them.

All these traders keep accounts of the Indian type. Credit is allowed to recognized customers for 15 days after which interest is charged.

The banks have no hand in financing the trade. The traders carry on business with their own capital.

There is no combination amongst the traders, and as a result there is a good deal of competition: villagers therefore can secure a fair price for their grain, and outsiders can also purchase grain at a fair rate.

No attempt is made at financing the agriculturists or at buying standing crops. The operations of the traders only begin when the grain comes to the market.

All the traders, some of them established for a long time, assured me that they had no regular clientele.

As mentioned above the chief kinds of agricultural produce that are dealt in are *juar*, gram, wheat, til, cotton and rice. The rice is all Burma rice and is imported from Calcutta. Cotton formerly used to go direct to Cawnpore or Bombay. Nowadays however most of it goes to Harpalpur where there is a ginning and pressing factory; part is taken up by the ginning factory at Mau and part goes to the Punjab. The Mau factory sends its cotton to Harpalpur for pressing; and from Harpalpur the cotton goes to Bombay.

Juar, gram and wheat are exported to the Deccan and Central Provinces (e.g., Lohargaon, Akola, Poona, Sholapur, Bhusaval, Nagpur, Jubbulpore, Ahmednagar, etc.), while til goes to the Punjab. When there is a failure of crop here, the traders import grain from outside, chiefly from the Punjab and the neighbouring districts (e.g., Kishor Mandi, Firozpur, Ludhiana, Phakwara, Chandausi, Meerut, Saharanpur, Muzaffarnagar, Hapur, Ghaziabad), and then Mau is the supplying centre for the Jhansi district, the neighbouring native states, and parts of the adjoining districts of Jalaun and Hamirpur. These traders also deal in salt, tobacco, ghee, sugar, gur, groceries, kerosene oil and cotton thread (yarn). There are also some who carry on business exclusively in one or other of these commodities.

Salt comes from Sambhar. None of the traders are members of the Sambhar Salt Trade Association. The cost price includes the profit of the Sambhar traders through whom the salt is purchased. It is said that when the Government treasuries are thrown open for deposit of salt revenue these Sambhar traders, with the large amount of capital they have at their back, manage to deposit all the revenue and then everybody has to purchase through them. Sometimes they charge as much as Rs. 200 per waggon (about 250 maunds) as their profit. The cost price comes to about Rs. 3 per maund and the wholesale price is Rs. 3-2-0 per maund.

The retail price is 1 anna 6 pies per seer or Rs. 3-12-0 per maund. The only factor bearing on the fluctuations in the retail price of salt is the uncertainty of supply.

Of the total amount of salt imported as much as 75 per cent. goes to the surrounding native states.

Tobacco is imported from Calcutta and Monghyr and to a small extent from Cawnpore. The wholesale dealers sell it dry at a profit of Re. 1 per maund; not less than five seers is sold wholesale. The retailers after mixing it with gur sell it as smoking tobacco.

Gur is imported from Basti, Gorakhpur and Fyzabad. One waggon load is imported at a time. Less than one maund is not sold wholesale. The cost price comes to about Rs. 8-6-0 per maund, and wholesale selling price is Rs. 8-8-0.

Ghee comes from the villages. After satisfying the local demand the remainder is exported. The traders finance the villagers who supply the ghee.

Ghee.—Rate of net profit—

	Rs. a.	Rs. a.
Wholesale	3 2 to 4 12	per cent.
Retail	6 4 to 7 13	" "

To sell kerosine oil dealers have to take a licence. The retail dealers are licensed by the municipality and are allowed to keep not more than 50 tins at a time.

Kerosine oil.—Rate of net profit—

	Rs. a.
Wholesale	8 2 per cent.
Retail	4 6 " "

Yarn both machine-spun and hand-spun is kept. Machine-spun yarn comes mostly from Bombay: hand-spun from the villages. The supply of hand-spun yarn is neither steady nor sufficient, nor of uniform quality.

Cotton thread (yarn).—Rate of net profit—

	Rs. a.
Wholesale	3 2 per cent.
Retail	6 4

Machine yarn costs Rs. 7-8-0 per sack of 5 seers: hand-spun yarn costs Rs. 1-4-0 per seer.

The yarn is required for the Kori and Ohhipa community, who prepare the country cloth known as *kharwa*, *chikpi*, *kasbi* and *ekri*.

Cocohut, tamarind, dyes, cloves, pepper, ginger, cardamum, almonds. The metal "dasta", etc., come from Bombay.

Groceries.—Rate of net profit—

	Rs. a.
Wholesale ..	6 4 per cent.
Retail ..	12 8 " "

From Calcutta are imported foreign sugar, betel-nut, sago, *katha*, etc.

From Cawnpore are imported potatoes, foreign and country sugar, *sulemani* salt, pippal, ajwan and red pepper, etc.

This is far from a complete enumeration of the various commodities included under the general term groceries. Most of the spices are imported.

The rates of profit in each of the commodities stocked by a grocer vary enormously. The rates given should be taken only as an average for all the commodities and as only approximately true.

There are also three or four wholesale dealers in cloth. The following are the chief kinds of cloth kept in stock :—

Average rate of profit—

	Rs. a.
Wholesale ..	6 4 per cent.
Retail ..	12 8 " "

Foreign.—Malma, long cloth, serge, Italian, gabrien, chintz, silk and woollens.

Swadeshi.—Markin, satin, dhotis, chaddar.

Local.—Kasbi, kharwa, ekri, chipai, lungi, razai, chunari, etc.

Foreign cloth is imported from Bombay and Cawnpore, *swadeshi* from Lalitpur, where there is an agency of the Indore Mills.

The purchasers are chiefly villagers. It is only when they have sold their grain that they have any money to spend, and thus the busy months in the grain trade are also those in which a brisk trade is carried on in cloth.

Marriages, fairs, etc., also give an impetus to the trade.

The turnover of each of these traders is about Rs. 15,000 on an average.

Two or three shops of Kachhis deserve special notice.

They are branches of firms with head offices at Bombay and branches at Calcutta and other big centres.

Their advantage consists in this that they can import the commodities from Bombay and Calcutta at the cheapest rate and can export grain from Mau after buying it at the market rate.

They carry on business in cloth, cotton thread, groceries or grain. They have been established only for three or four years, and yet their turnover is about Rs. 30,000 yearly. They carry on business only for eight months and close up the shop during the rainy season, which is the slack season in Mau.

The retail traders purchase their stock from the wholesale dealers. (During the busy months of the grain trade, the retail traders in grain sometimes find it possible to buy direct from the villagers.) Some of them buy on credit and pay up after they have sold the goods and realized the money. Those who buy on credit cannot of course buy as cheap as those who pay cash. They also have to pay interest if they do not pay up within 15 days.

The rate of retail profits is about double the wholesale rate. Prices in Mau are not entirely governed by custom; there is competition at work, though it is not consciously carried on, and it is not of the cut-throat type.

The retail traders do not keep any accounts, but some keep memos of transactions on credit.

Money is the medium of exchange and there is no barter.

A grocer stocks so many things that an enumeration of some of the chief articles will not be out of place :—

All the ingredients of spices, e.g., turmeric, dhana, black and red pepper, ginger, pippal, cloves, cardamum, shonp, khatai, etc.

Rice, dal and other kinds of grain. Wheat flour, ground gram, etc.

Betel nuts, *katha*, sugar, gur, chewing tobacco, ghee, til, oil, kerosene, salt, matches, *badami* paper, *sutli*, country cigarette; (*biri*). Medicinal herbs (used in Unani and Ayurvedic system).

Sherbets and perfumery.

Of course there are big grocers and small ones; the latter do not stock all the articles abovementioned.

There are the usual number of confectioners' shops—small and big. Their profits (retail) vary between Rs. 9-6-0 and Rs. 12-8-0 per cent.

There are two or three what may be called general merchants. They bring caps and steel trunks of inferior make from Agra and Cawnpore and sell them at Mau.

I came across only one shop where are kept modern goods, e.g., combs, buttons, playing cards, Dietz lanterns, Agra caps, *gata* (from Delhi), scissors, locks, slates, pencils, brushes, matches, tea, looking glasses, ink, inkstands, scales, sewing thread, toilet and other soaps, penholders, tape, belts, steel trunks, vests, socks, paper, woollen thread, etc. The locks are Aligarh locks, caps and *gata* and some soaps are also of Indian manufacture. Most of the goods are of the showy Japanese variety. The shopkeeper purchases these things at Jhansi: sometimes he also goes to Agra or Cawnpore to purchase his stock.

The profits for the different articles vary within wide limits. On an average the profits may be taken to be somewhere between 15 to 20 per cent. One reason why there are not more shops of this kind is that Jhansi is near and people can buy these things cheaper at Jhansi.

There are of course the tinsmiths, blacksmiths, gold and silversmiths.

The tinsmiths are petty shopkeepers. They buy kerosene oil tins and prepare "*chalnis*," "*piehkaris*" and lanterns. The glass of the lanterns they purchase at Jhansi.

They earn about 8 annas per day. There are three shops of blacksmiths who purchase their goods at Jhansi and sell them at Mau. The goods kept in stock are those in general demand, e.g., axles, tyres, links, wires, screws, bolts, frying pans, iron jars, etc.

The silver and gold smiths are none of them craftsmen of any note. They prepare ornaments in general use among the villagers. Their wages are more or less determined by custom and do not respond readily to changing economic conditions.

There are two shops where brass and copper utensils, etc., are kept. Toys and boxes are imported from Benares and brass bells (hung round the necks of bullocks) come from the Katera Jagir.

There are two shops which supply dyes to the Kori and Chhipa community. The dyes (wet) are imported from Bombay.

APPENDIX E.

Overcrowding in large cities.

By W. R. TENNANT, I.C.S.

A SUGGESTION was made by the Government of India that some special investigation be made into the housing of the people in the large industrial cities. After consultation with Commissioners of Divisions and Chairmen of large municipalities and of the Improvement Trusts of Lucknow and Cawnpore it was resolved to confine the special inquiry to the municipalities of Lucknow, Cawnpore, Allahabad and Benares only, but in compiling the ordinary Imperial Tables for age, sex, religion and occupation for these cities to abstract separate figures for small municipal sub-divisions, either for mohallas (chaks in Cawnpore) or, if these were too small singly, for compact groups of mohallas.

2. The Imperial Schedule records population by "census" houses--i.e., commensal families--and not by houses in the ordinary sense of the term. Thus one tenement house in the "pakka mahals" of Benares may easily contain over twenty "census" houses. The means chosen for correlating "census" to structural houses were by enjoining on the municipalities concerned to see that each structural house had a separate whole number and directing the census staff to affix during the house-numbering period a sub-number ($\frac{x}{1}, \frac{x}{2}, \frac{x}{3}$, etc.) for each commensal family ("census" house) found within the structural house denoted by the whole number X. These whole and sub-numbers were entered on the "enumerator's block list" and he was enjoined to bring the actual number of commensal families in any house up to date during the preliminary enumeration in the fortnight preceding Census Day, entering at the same time in two extra columns (a) the number of persons ordinarily composing that commensal family (shown in the subsequent tables as the *de jure* population), and (b) the number of rooms (or fractions of a room) that that commensal family occupied. After Census Day these block lists (corrected as far as possible by the striking out of houses found empty on Census Day) were collected by census circles, which in terms of the rules included only one mohalla or a compact group of undivided mohallas. Thus in the abstraction done from the block lists under my supervision in Naiini Tal it was possible to tabulate *inter alia* the number of structural houses occupied and empty, the number of rooms each contained, the number of commensal families, the number of commensal families living in one, two, three, etc., roomed houses, and the average number of persons in each commensal family. The *de facto* figures for the total population on Census Day of the census circle and the number of actual commensal families were obtained by tabulating Table VII by circles. This served as a useful check on the accuracy of these *de jure* figures.

3. Unfortunately the period of house numbering and the preliminary enumeration coincided with the period of maximum passive resistance to any species of Government service. Census work is voluntary and unpaid. Suitable enumerators were hard to get and harder to keep in these cities, and those who loyally and faithfully carried out the filling up of the Imperial Schedules so successfully worked generally in much larger areas than had been originally intended. While they did their best therefore with this subsidiary matter of families and rooms in the block list, they wisely subordinated it to the main issue. Thus the block lists, except in the cases of Cawnpore and Lucknow, which had municipally-paid, whole-time, trained enumerators, were not so fully and accurately prepared as one could have wished. Moreover, the District Census Officers and the Charge Superintendents had little or no time available to devote to the proper supervision and checking of their preparation. It is pleasing to find that the majority of the lists have been so faithfully done; but many blocks go to each circle and few circles are without one or two very imperfect block lists. Mistakes tend to average out and there are only a few circles which give grotesque figures. For most the figures given are reasonably accurate and the Municipal and Improvement Trust authorities knowing local conditions and peculiarities far better than I can will, I trust, be able to make some practical use of them.

4. There are certain avoidable defects and omissions which should be guarded against next time a similar inquiry is attempted. (1) The municipal authorities did not in nearly every case bring their house-numbering up to date and so provide the whole numbers for structural houses on which enumerators might base their sub-numbers. This has led to quaint figures occasionally in the "number of families to a structural house" column. Far too little care was taken by them to allocate only whole mohallas to census circles. Partitioned mohallas mean that figures for all census circles which contain the fractions must be combined, and so the advantage of detailed figures for small areas is lost. (3) Occasionally the mohallas were not in a compact group at all. These defects should not be allowed to recur.

The most serious yet unforeseen defect has been that (with the honourable exception of Cawnpore) none of the municipalities could give me the area of all its mohallas. Lucknow and Benares are vague about the boundaries of many of them, and in no case when I first approached them had any of them an accurate large scale map showing the boundaries, off which these areas could be measured. In Lucknow the sole repository of wisdom about mohalla boundaries is a venerable municipal clerk, and from his oral tradition and their own surveys the Improvement Trust has succeeded in constructing me a map with mohalla

Origin and substance of the inquiry.

Its scope and method.

Accuracy of the statistics.

Defects and omissions.

Density.

boundaries marked, but the areas of all the mohallas I have not now—fifteen months after I first asked for them—been able to extract. I know of no other standard to measure overcrowding but area, and thus most reluctantly must leave the Lucknow figures incomplete. What areas I have got are taken from the 1863–1867 settlement—the latest figures extant purporting to be accurate—but many new mohallas have been created since then and many realignments of boundaries taken place. Thus what density figures I print for Lucknow I give with all reserve.

In Benares I found the same difficulty. The municipality there has given me certain figures, but none for the southern wards which manifestly contain the greatest overcrowding, i.e., between the Chank and the river front. Moreover, in Benares the Abstraction office and the District Census Officer between them managed to mislay certain circle lists which link up census circle numbers with the actual wards and mohallas they represent. I am not satisfied with the correctness of their attempts at identifying them, and shall give no figures for Benares in this appendix, but merely hand over the material in manuscript to the municipality to make what use it can of what it can satisfactorily identify *in situ*.

For Allahabad the Improvement Trust has kindly managed to secure me figures of area. I publish them and the density figures depending on them, with the rider that it was in Allahabad perhaps that loyal census workers were most shorthanded and encountered the fiercest opposition from non-co-operators, and had therefore the least chance of making their block lists a full and accurate basis for the special survey.

Particulars of age, sex and occupation by municipal sub-divisions.

Mention has already been made of the elaboration of Imperial Tables VII and XVII (age, sex, and occupation by religion) to show separate figures for small municipal sub-divisions. These figures have all the claim to being reliable that the Imperial Tables have themselves, subject only to qualification that I have been given correct information by the municipalities as to what mohallas are included in each of the various circles. The bulk of these tables is such that they cannot, because of considerations of economy and limited interest, be printed here or elsewhere; but they will be handed over to the municipalities or Improvement Trusts concerned. I have summarised some of the most interesting information in the appended tables, and regret that the financial stringency which necessitates the closing of the Census office immediately the Imperial Tables are complete has precluded my attempting the analysis of the mass of materials collected. I trust that this will be done by the municipal or Improvement Trust officials (or the economic research students of the local universities) who are in a better position to know the details and analyse the figures revealed by this census than the present writer.

Explanation of tables.

5. The tables printed with this appendix are largely self-explanatory. The area figures in column 3 have been got in the ways already described. Those in columns 4 to 13 are the actual figures of Census Day—18th March, 1921—and fall short of the municipal aggregate only because they exclude travellers by boat and train, etc. The density figures of column 12 are the actual census figures divided by the area in acres. The figures of column 13 are for "all religions," but figures for each of the chief religions can be worked out from columns 4 to 9. Columns 14 to 23 are based on the data which the census enumerators collected in the manner described during the preliminary enumeration in March, 1921, and are subject to the abovementioned qualifications of their accuracy, e.g., the *de jure* or normal population of the circle as contrasted with the total of columns 4 to 11 inclusive suggests inferences as to the thoroughness with which the block lists that go to constitute the census circle have been prepared, and therefore the value of the figures in columns 14 to 23. Column 14 contains figures which municipalities ought easily to be able to check by their own records and use the amended figures divided into the figures of column 15 to get a more accurate figure for column 16—the average number of persons living in a structural house. Column 17 gives the number of "census houses" found occupied on Census Day, and column 18 has been obtained by dividing this into the normal population. Columns 19 to 23 show what proportion of the total population lives in houses consisting of one or more living rooms. "House" here means the room or rooms occupied by one commensal family.

The second part of the tables gives for municipal wards the number of workers, male and female, and dependents, whose occupation falls into one or other of the 53 occupational groups detailed at the head of the page. Space did not permit of each detailed occupation being given, but the municipal tables containing these details have been made over to those concerned.

Use of the tables.

6. It will readily be seen that these tables do not require general conclusions to be drawn about them by a Census officer, but practical action to be taken by the appropriate local authorities in the individual areas where their study discloses remediable social and economic mal-adjustments. If I may suggest some lines of practical research which I should have liked to undertake myself had there been time before the Census department closed down, they are these—

- (1) Municipal Health Officers will have data by age groups, sexes, and religions whence they may construct age curves for municipalities and individual wards, etc., for comparison with the Provincial age curve and the standard proportional age distribution, and they will be able to form some estimate of the connection between the overcrowding in specific areas and the birth and death-rates of that area. For these rates they will now have detailed figures to serve

as a basis for their construction for areas smaller than a whole municipality. They will have material too for correlating vitality and occupation.

- (2) Social workers will find how great is the disproportion between males and females in all four cities, and how that disproportion varies in different areas. This is especially noticeable in an industrial city like Cawnpore, where there are thousands of homeless male workers.
- (3) For the municipalities and Improvement Trusts generally figures are now available for the localization of various occupations. In forming new settlements they will know where for example carpenters, washermen, and the like exist surplus to needs. The proportions of workers to dependents and of female to male workers give a rough indication of the prosperity of an occupation, and this can be supplemented by correlating actual workers to the numbers in the occupation after distributing the latter according to the age curve of the locality. The figures for occupations are given for each city as a whole in Imperial Table XVII. An excess in the proportion of female to male workers or an unusually low age for actual workers in a sub-division will suggest over-competition in that locality.
- (4) Educational authorities will find detailed data of population by age periods for census circles in the compilation registers, and so should be able to calculate very exactly where schools are needed and the number of children of school age.

7. The figures of density are not very high considered by standards like Bombay or New York, but the reason obviously is the rarity of the house with more than one storey or at most two in the cities of the province. Considering the smallness of the usual house and the number of persons who find shelter in it, there is overcrowding enough in areas of all four cities to merit serious attention, especially when it is observed that (as in two wards of Cawnpore) some 80 per cent. of the inhabitants live in one-roomed houses and in several circles all the inhabitants do. In contrast with the figures for these cities are those of a Scottish city of about the size of Allahabad, where only 4·4 per cent. were enumerated in one-roomed houses. Another notable thing is the perceptibly smaller size of the commensal family in these cities than in the province as a whole. This is most marked in Cawnpore where 3 instead of 4·4 is the average figure. This is due doubtless in greater part to the number of workers who come to the cities without their wives and families, but how much it may be due to a lower birth-rate is a matter I must leave to the Public Health Officers. Another startling figure compared with Western standards is the very low percentage of females to males averaging below 70 per cent. in Cawnpore and being of course specially marked in the wards containing industrial population.

General conclusion.

In conclusion, I suggest that these sub-divisions, amended where they are faulty, should be stereotyped as the units for a similar survey at next census. Much more can be learnt from a comparative use of these figures than from the absolute figures of the first of a series, but this will only be possible if the sub-divisions of this census are retained. Lucknow Improvement Trust has now its census circles clearly marked on a large scale map. I have urged the other three municipalities to do the same, so that there may be no ambiguity about the area or the constituent mohallas of any census circles when the next survey is undertaken.

Census number.	Name of constituent ward and mohallas.	Area in square yards.	Population.							
			Hindus.		Muhammadans.		Christians.		Others.	
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
Ward no. I ..	Civil Lines ..	..	7,226	4,916	1,517	871	1,202	1,129	102	79
(Circle 1-10) ..	..	..	..	..	..	..	..	..	..	..
Ward no. II ..	Kaira Coloniganj ..	1,463,686	8,649	7,305	3,038	2,408	218	278	114	76
Circles no. 1 ..	Beli ..	44,555	258	160	272	241	..	..	..	..
" 2-4 ..	Katra, Bakhtiyari, Faqirganj ..	260,828	3,548	2,631	1,523	1,123	133	215	97	58
" 7-10 ..	Coloniganj ..	526,844	2,270	1,703	508	319	60	47	15	18
" 11 ..	Jandhwal, Rasulabad, Mendhori, Sillakhama ..	166,374	777	768	269	190	11	6	..	..
" 12 ..	Gobindpur, Chillah, Shekoti Mahadeo, Tailerganj ..	102,260	557	652	126	100	..	..	..	..
" 13 ..	Sarai Lulla, Pur Gadaria ..	18,222	386	372	83	79	14	10	2	5
" 14 ..	Sadiabad, Chandpur-Satori, Satori ..	244,803	894	929	256	254	..	..	..	..
Ward no III ..	North Kotwali Ward ..	3,660,510	10,890	7,989	5,846	4,655	399	296	165	103
Circles nos. 1, 2 ..	Malaka, Budlepur ..	55,044	965	935	370	253	48	39	6	..
" 4 ..	Johari Tola, Tripolia, Mahajani Tola, Chak ..	178,611	1,155	977	397	329	2	3	3	1
" 5 ..	Pandariba, Chachand, Kanchgham ..	58,888	619	585	6	1	..	..	29	16
" 6 ..	Johnstonganj, Chowk, Mirganj Thatheri Bazar ..	81,833	480	325	311	269	4	..	12	12
" 7 ..	Hammam, Sabzi Mandi, Sarai Garhi ..	78,945	343	262	921	671	15	5	1	4
" 8, 9, 10, 12 and 13 ..	Dondipur, Minhajpur, Gariwantola, Khurdabad, Lukerganj, Garhi ..	1,765,317	2,525	1,857	1,016	1,271	186	126	66	28
Circle no. 11 ..	Bhawapur ..	833,333	241	115	36	11	83	90	..	..
" 14 ..	Tazia kalan, Shahganj ..	126,667	1,017	757	1,092	987	34	17	8	5
" nos. 3, 15, 16, 17 ..	Bahadurganj, Kothaparcha, Rambath, Sharakabagh, Badshahimandi, Mohtashimganj, Hewott Road, Gosha n Tola ..	481,872	3,515	2,776	1,097	863	14	16	40	37
Ward no. IV ..	South Kotwali ..	2,370,952	11,717	9,760	7,937	6,915	41	40	136	87
Circle nos. 1, 2 ..	Rajreppur, Chakkia, Beniganj, Karbala, Nohapur, Audinpur, Kesarimisari, Purwa-Mandari ..	119,424	1,096	1,019	541	504	2	1	4	6
" no. 3 ..	Chauki Karamat, Kareli, Himmatganj, Kala Danda, Sarai Khuldabad, Khussauli, Tola ..	164,333	782	586	225	176	4	4	14	..
" 4 ..	Nai Basti, Sultanpur, Gangaganj, Purwa Manohardas ..	152,166	817	665	814	721	5	5	..	..
" 5 ..	Attala ..	106,866	143	89	840	687	..	..	..	..
" 6 ..	Tulsipur, Saddiyapur, Rasulpur, Karelabagh ..	234,999	884	842	442	381	..	..	2	..
" 7 ..	Khuldabad ..	50,000	415	319	159	116	6	7	1	..
" 8 ..	Ahmadganj, Yakutganj, Kamiganj, Dara Muhammad Shah Baidantola ..	82,499	155	141	571	482	4	4	..	..
" 9 ..	Dara Shah Ajmal, Dara Shah Ghulam Ali, Kolahan Tola, Koftgan Tola ..	95,825	323	286	846	750	..	..	..	..
" 10 ..	Chawk, Bajaza, Nakhsh Kohna ..	36,044	404	381	185	147	..	..	1	..
" 11 ..	Ranj Mandi ..	132,132	740	518	533	473	2	2	110	79
" 12 ..	Khushal Parbat, Chawk Ganga Das ..	64,999	1,064	916	5	4	..	..	..	..
" 18 ..	Atarsula ..	224,414	750	671	315	271	2	..	..	..
" 14-17 ..	Yahiapur ..	253,833	2,328	1,878	661	633	6	6	4	2
" 19 ..	Meerganj, Sarai Meer Khan, Uncha Mandi ..	68,333	798	647	149	144	10	11	..	..
" 19 ..	Bahadurganj ..	147,777	193	157	599	535	..	..	..	..
" 20-21 ..	Daryabad, Meeranpur, Balwaghat South side ..	437,778	821	695	1,020	911	..	..	..	..

ABAD.

Density per acre.	Proportion of women to 1,000 men (all reli- gious).	Number of struc- tural houses in circle.	Normal popula- tion of circle.	Number of per- sons per structu- ral house.	Number of com- munsal families.	Average number of per- sons in family.	Percentage of population living in.					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms. and over.	
12	13	14	15	16	17	18	19	20	21	22	23	24
..	696	1,761	13,964	7.9	3,102	3.2	47	17	8	8	20	
..	
79	538	3,436	17,336	5.0	4,068	4.2	20½	28	17	11½	23	
112	949	253	893	3.5	234	3.6	32	27	18	15	8	
180	780	1,074	6,308	6.1	1,601	3.9	19	15	16	12	18	
46	728	863	4,402	5.1	962	4.5	17	21	15	11	36	
38	997	505	2,009	3.9	476	4.0	27	34	21	11	7	
68	1,101	260	861	3.3	210	4.0	18	43	23	12	4	
155	1,064	100	551	5.0	142	3.8	35	45	8	7	5	
46	1,029	445	2,312	5.2	143	5.2	18	37	23	11	11	
40	754	3,923	25,302	7.2	6,488	4.3	28	22	14	11	25	
178	451	171	1,996	11.3	409	6.7	52	17	7	8	16	
78	841	364	2,831	7.7	596	4.7	24	15	10	10	41	
103	680	174	1,248	7.0	316	3.9	10½	17½	11	17	44	
84	751	218	1,388	6.3	344	4.0	22½	22	14	13½	28	
136	736	331	2,116	6.3	522	4.0	21½	33	22½	9	14	
21	747	949	6,740	7.0	1,558	4.3	28	23	13	10	10	
34	595	43	470	10.9	130	3.6	47	9	11	14	19	
150	821	537	3,685	6.8	830	4.4	37	18	15	10	20	
84	790	1,130	7,888	6.8	1,788	4.4	24	26	14	12½	23½	
76	847	5,116	28,137	5.5	6,332	4.4	20	23	21	14	22	
129	981	654	2,309	3.5	563	4.1	21	24	23	13	19	
58	75	411	1,723	4.1	404	4.0	23½	26	17	13	20½	
97	885	648	4,101	6.3	911	4.5	17	21	20	15	27	
76	769	90	679	7.5	91	7.5	4	14	29	22	31	
53	92	207	1,072	5.2	188	5.6	7	23	23	17	30	
99	761	112	899	8.0	244	3.6	34½	24	10½	16	15	
80	859	114	1,093	9.6	204	5.0	19½	17½	17	15	21	
111	886	386	1,922	6.7	432	4.4	16	27	25	13	19	
143	810	145	1,037	7.15	299	3.0	52	21	12½	9½	5	
90	769	345	1,679	4.8	393	4.0	15	22	33	15	15	
148	869	274	2,356	8.6	533	4.4	34	19	17	14	16	
43	682	221	1,682	7.6	347	4.8	12	19	16	17	36	
105	841	724	4,293	5.9	913	4.7	18	24	24	12	22	
125	838	169	633	4.0	196	3.4	9	48	15	6	22	
49	873	26	281	10.8	104	2.6	64	4	8	1	28	
86	872	699	2,828	8.6	510	4.5	13	27	30	11	19	

Census number.	Name of constituent ward and moh. lbs.	Area in square yards.	Population.							
			Hindus.		Mohammadans.		Christians.		Others.	
			Males.	Females	Males.	Females.	Males.	Females	Males.	Females
1	2	3	4	5	6	7	8	9	10	11
Ward V ..	Moothiganj, Kydganj ..	2,216,699	8,928	7,067	2,647	2,191	261	124	92	96
Circle no. 1 ..	Bahadurganj ..	50,000	581	260	224	224	..	8	14	8
" 2-10 ..	Moothiganj, Kota Parcha ..	520,000	2,864	2,266	466	380	72	51	37	26
" 11 ..	Katghar, Balwaghat ..	299,555	561	388	298	244	15	10	..	2
" 12 ..	Moothiganj and Gaughat ..	106,867	215	37	28	1	188	18	6	7
" 13 ..	Nai Basti ..	121,111	580	472	78	48	5	7	8	..
" 14, 18 ..	Chokhandi ..	122,222	607	460	29	9	5	2	..	2
" 15 ..	Pura Baldi ..	97,222	479	418	173	152	2	..	11	5
" 16, 17, 20 ..	Khalasi line ..	222,222	631	556	729	592	1	..	7	4
" 19 ..	Pura Dhakoo ..	29,166	198	176	57	85	..	..	..	..
" 21 ..	Bairohna-Kydganj ..	180,000	651	583	204	178	..	..	..	..
" 22, 25 ..	Bairehna ..	32,000	592	512	104	76	4	6	1	2
" 23, 27 ..	Baika Bagh ..	55,472	490	840	110	85	19	13	13	9
" 24 ..	Talab Nawal Rai ..	36,027	246	280	16	16	..	9	..	30
" 26 ..	Joemchar, Chak Lalia, New Malaka, Lowther road.	54,957	365	318	124	144	..	..	..	1
" 28 ..	Balwaghat ..	57,578	89	5	7	..	..	..	..	..
Ward no. VI ..	Daraganj ..	881,300	5,742	4,907	870	723	10	10	..	4
Circle nos. 1-4 ..	Mauri, Daraganj, Mirangali ..	315,773	2,329	1,948	192	211	1	1	..	..
" 5, 6, 6a ..	Baski khurd ..	83,250	1,236	1,101	194	190	..	..	..	..
" 7, 8, 8a ..	Baski kalan, Purwa Paraun, Pura Dallal, Dhatharia, Allapur, Fatehpur Bichwa, Hashimpur.	251,672	951	877	275	282	1	..	..	..
" 9 ..	Matyari, Allopi Bagh, Madhwapur, Subattia Bagh.	97,666	503	414	9	7	..	..	..	..
" 10 ..	Georgetown ..	102,989	723	507	100	27	8	9	..	4
Ward no. VII ..	East Indian Railway station	..	2,708	1,137	855	382	375	349	16	8
Circle nos. 1-10 ..	Settlement ..	..	..	..	..	..	..	..	..	..
CAWN										
Ward no. I.	Civil Lines ..	12,337,696	15,562	8,831	2,995	1,904	1,062	1,089	137	98
Circle no. 1 ..	Chak no. 1 Nawabganj ..	111,857	494	356	119	98	..	..	1	2
" 2 ..	" 2 ..	120,462	661	515	75	54	..	..	..	..
" 3 ..	" 3 ..	962,071	229	133	67	38	6	3	..	..
" 4 ..	" 4 old Cawnpo ..	592,080	382	294	46	45	4	2	..	..
" 5 ..	" 5 ..	110,463	360	252	9	9	..	..	..	..
" 6 ..	" 6 ..	358,133	191	192	12	8	20	14	7	..
" 7 ..	" 7 Gwaltoli ..	3,177,373	729	475	170	100	15	14	..	..
" 8 ..	" 8 ..	782,542	1,137	642	93	63	62	13	..	2
" 9 ..	" 9 Civil Lines ..	269,173	1,981	1,076	156	117	237	204	7	..
" 10 ..	" 10 ..	504,408	1,275	899	236	179	58	52	1	2
" 11 ..	" 11 Gwaltoli ..	749,035	1,310	696	514	398	39	31	2	2
" 12 ..	" 12 ..	469,991	2,248	1,083	591	886	145	108	1	3
" 13 ..	" 13 Parmat ..	513,013	1,807	1,112	229	93	44	31	..	..
" 14 ..	" 14 Civil Lines ..	1,154,044	464	243	138	129	124	219	1	2
" 15 ..	" 15 ..	1,328,808	1,591	649	468	169	280	369	87	40
" 16 ..	" 16 ..	1,143,644	510	217	73	28	40	41	30	31
Ward no. II	Patkapore ..	691,515	8,631	7,014	3,128	2,451	52	31	79	60
Circle no. 17 ..	Chak no. 17 Kursawar ..	118,096	174	184	200	151	5	4	10	8
" 18 ..	" 18 ..	53,240	989	731	203	170	10	6	25	22
" 19 ..	" 19 Patkapore ..	60,500	767	678	557	417	2	..	11	14
" 20 ..	" 20 ..	48,270	328	241	853	699	..	..	..	..
" 21 ..	" 21 Etawah Bazar ..	16,780	290	243	105	92	..	..	..	..
" 22 ..	" 22 Filkhana ..	30,250	424	367	79	82	..	..	..	..
" 23 ..	" 23 Patkapore ..	85,730	312	218	72	69	..	..	..	..
" 24 ..	" 24 ..	60,550	1,061	859	282	167	8	4	7	7
" 25 ..	" 25 Shutar Khana ..	37,389	255	163	121	76	28	14	19	2
" 26 ..	" 26 Patkapore ..	58,685	787	619	156	110	4	8	3	2
" 27 ..	" 27 Roti Godown ..	85,090	461	373	187	144	..	..	..	..
" 28 ..	" 28 Filkhana Bazar ..	43,500	644	519	190	169	..	..	..	..
" 29 ..	" 29 Belduri Mahal ..	25,047	405	371	43	14	..	..	..	..
" 30 ..	" 30 Maheshari Mahal ..	20,620	780	688	27	23	..	..	..	..
" 31 ..	" 31 Lathi Mahal ..	20,449	580	437	45	51	..	..	4	..
" 32 ..	" 32 Subsimandi ..	36,300	454	413	58	37	..	..	..	..

—(concluded).

Density per acre.	Proportion of women to 1,000 men (all religions).	Number of structural houses in circle.	Normal population of circle.	Number of persons per structural house.	Number of communal families.	Average number of persons in family.	Percentage of population living in—					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over.	
12	13	14	15	16	17	18	19	20	21	22	23	24
46	795	3,936	20,043	5.1	5,126	3.9	23	30	15	10	22	
108	807	282	1,110	3.9	263	4.0	25	30	12	11	22	
57	774	931	5,004	6.0	1,720	3.0	37½	24½	11	7½	9½	
25	737	256	1,127	4.4	295	3.8	21	43	9	11	16	
21	163	33	527	15.9	100	5.2	35	9	4	2	50	
48	781	108	918	8.5	239	3.8	18	39½	20½	4	18	
44	747	253	1,292	5.1	306	4.2	24	30	12	13	21	
62	865	227	1,258	5.5	281	4.4	23½	30½	14	9	23	
55	847	493	2,388	4.8	578	4.1	11	34	25	10	20	
86	1,024	132	367	2.7	113	3.0	24	30	12	13	21	
43	891	350	1,554	4.4	357	4.0	4½	35	26	15½	19	
196	850	456	1,275	2.7	349	3.8	14	33	21	15	17	
94	708	76	904	11.8	129	7.0	7	23	7	12	51	
76	1,444	175	773	4.4	169	4.5	12	25	13	21	29	
84	947	164	946	5.7	224	4.0	31	33	12	6	18	
9	52	..	..	..	..	..	..	..	..	..	..
67	852	2,753	9,381	3.4	2,809	3.3	26½	27½	16	8	22	
67	824	1,454	4,638	3.2	1,286	3.6	26	28	19	10	17	
162	940	706	1,932	2.7	788	2.4	35	36	13	6	10	
46	945	310	1,298	4.1	326	3.9	28	29	17	12	14	
46	822	217	196	0.8	54	3.7	3	41	47	6	..	
65	658	66	1,320	20.0	357	3.7	23	10	10	5	52	
..	474	212	3,699	17.4	203	18.2	4	1	1	3	91	
..	
PORE.												
12.4	603	5,866	31,596	5.4	10,248	3.0	66½	15	9	3½	6	
46	743	237	928	3.9	229	4.0	42½	33	9½	12½	2½	
52	773	363	1,262	3.5	300	4.2	33½	15	34	7	10½	
2.4	570	76	479	6.3	145	3.3	44½	27	14½	10	4	
6.3	769	251	787	3.1	222	3.5	50½	29½	12	1	7	
25	708	209	706	2.0	180	3.9	39½	11½	29½	3	13½	
7.4	648	76	531	7.0	191	2.9	65	21½	5	6	2½	
2.3	644	398	1,534	3.9	584	2.6	72½	17	5	2	3½	
13	554	1,147	2,735	2.4	1,019	2.7	96	2	1	..	1	
68	586	945	3,795	4.0	1,128	3.4	69	23	6	2	1	
26	721	293	2,522	8.6	839	3.0	93½	3½	1	..	2	
19	604	321	2,984	9.3	961	3.1	80	9	4	2	5	
52	528	438	5,234	12.0	1,791	2.9	74	12	6½	3	4½	
33	569	390	3,376	8.7	1,116	3.0	69½	18	6	2	4½	
5.5	818	60	1,271	21.0	400	3.1	78	4½	6½	1	10	
13	507	147	2,555	17.4	838	3.1	66	8½	1½	2	22	
4.1	485	455	902	2.0	306	3.0	91	3	1	..	5	
150	803	2,023	20,840	10.3	6,114	3.2	81	12½	3½	2	1	
28	751	52	646	12.4	208	3.1	71½	18	5	3	2½	
191	783	257	2,015	7.8	575	3.5	68½	20	7½	2	2	
195	839	289	2,316	9.6	620	3.7	49	30	15½	2	3½	
212	796	205	2,110	10.3	655	2.2	90	4	2½	1½	2	
225	848	85	714	8.4	217	3.3	100	..	..	..	..
104	898	124	848	6.8	210	4.0	100	..	..	..	..
210	773	94	651	7.0	158	4.1	77½	20	1	1½	..	
170	788	184	2,384	17.4	696	3.3	90	7	1	2	..	
88	603	47	638	13.5	195	3.2	66	14½	9	9½	1	
139	773	69	1,657	24.0	600	2.8	83	10	3	2½	1½	
161	708	97	1,098	11.8	391	2.8	66½	20	6	5	2½	
168	813	123	1,525	12.4	439	3.5	97	3	..	..	..
161	859	71	810	11.4	266	3.0	67	24	9	..	..
158	819	162	1,469	9.1	468	3.1	100	..	..	..	..
268	815	129	1,062	8.2	378	2.8	95½	3½	..	1	..	
198	879	135	952	7.0	338	2.8	75½	22½	1	1	..	

The data for columns 14 to 24 were collected by enumerators during the preliminary enumeration done during the three weeks preceding the actual Census day. The actual census figures of each unit are found in columns 4 to 13; what may be termed the *de jure* or normal figures in column 14 onwards. Columns 14 and 16 figures depending as they do on the vagaries of Municipal numbering are not reliable.

Census number.	Name of constituent ward and chak.	Area in square yards.	Population.							
			Hindus.		Muhammadans.		Christians.		Others.	
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
Ward no. III ..	Moolganj ..	639,727	7,829	5,567	3,881	3,008	110	55	113	68
Circle no. 8182 ..	Chak no. 38 Thatri ..	42,850	918	714	72	60	21	..	25	18
" 38 ..	" 84 Dafali mahal, Rakabganj ..	20,570	571	499	28	21	..	..	..	..
" 84 ..	" 85 Bengali mahal ..	31,460	959	755	97	111	..	..	..	..
" 35 ..	" 86 Khas Bazar ..	59,290	595	440	58	40	34	17	1	6
" 36 ..	" 87 Kursawan ..	139,150	383	194	136	89	33	25	23	3
" 37 ..	" 88 Khas Bazar ..	45,617	894	577	53	41	1	..	11	7
" 38 ..	" 39 Maida Bazar ..	35,090	238	117	208	158	..	..	9	2
" 3940 ..	" 40 Naya Chauwk ..	85,805	931	681	761	504	11	10	33	32
" 41 ..	" 41 Chau Chaubey Gola ..	26,620	467	305	352	233	10	2	7	..
" 42 ..	" 42 Misri Bazar ..	32,065	423	301	340	281	..	..	..	..
" 43 ..	" 43 Dhobi Mahal ..	30,250	706	485	251	163	..	..	..	..
" 44 and 45	" 44 Butcher Khana Khurd ..	67,760	427	328	1,267	1,118	..	..	..	..
" 46 ..	" 45 Butcher Chhap-par Mahal ..	24,200	332	223	263	180	..	1	4	..
Ward no. IV ..	Hayatganj ..	541,351	7,520	4,943	929	603	1	..	40	65
Circle no. 1 ..	Chak no. 46 Ghasmandi ..	43,560	519	346	52	23	..	..	26	37
" 2 ..	" 47 Gudri Bazar ..	37,510	536	362	21	5	..	..	10	26
" 3 ..	" 48 Generalganj ..	42,350	795	458	108	49	..	..	..	..
" 4 ..	" 49 Nakhas ..	43,560	580	287	23	4	..	..	4	2
" 5 ..	" 50 Ghasmandi Mondha ..	53,240	1,009	849	14	2	..	..	..	..
" 6 ..	" 51 Ramganj ..	42,350	421	176	15	10	..	..	..	..
" 7 ..	" 52 Collectorganj ..	30,300	129	47	75	17	..	..	..	..
" 8 ..	" 53 Nayaganj ..	21,780	138	26	3	1	..	..	..	..
" 9 ..	" 54 ..	33,759	206	72	2	..	..	..	..	..
" 10 ..	" 55 Generalganj ..	34,485	406	216	9	4	..	..	..	..
" 11 ..	" 56 Shatranji Mahal ..	19,360	397	231	53	30	..	..	..	..
" 12 ..	" 57 Sikri Mahäl ..	30,250	594	446	192	157	..	..	..	..
" 13 ..	" 58 Nacha ghar ..	40,535	876	717	185	240	1	..	..	..
" 14 ..	" 59 ..	35,090	662	529	74	59	..	..	..	..
" 15 ..	" 60 Dalmandi ..	27,225	252	181	3	2	..	..	..	..
Ward no. V ..	Sadar Bazar ..	1,189,815	9,856	6,934	2,436	1,640	100	85	3	5
Circle no. 16 ..	Chak no. 61 Sitaram Mahäl ..	42,350	716	573	149	119	1	2	..	..
" 17 ..	" 62 Harbans Mahäl ..	50,820	826	611	148	109	10	3	..	..
" 18 ..	" 63 ..	135,972	435	274	218	135	27	48	..	2
" 19 ..	" 64 Gadaria Mahäl ..	55,660	1,109	904	356	317	11	8	..	..
" 20 ..	" 65 Moti Mahäl ..	59,048	1,046	789	434	312	1	1	..	1
" 21 ..	" 66 Kachhiana Mahäl ..	44,770	1,092	925	118	90	..	..	1	1
" 22 ..	" 67 Daulatganj ..	31,460	550	271	52	37	..	..	..	..
" 23 ..	" 68 Lokman Mahäl ..	39,970	675	505	21	13	..	..	2	1
" 24 ..	" 69 Danakhori Mahäl ..	42,350	940	764	78	68	..	..	..	..
" 25 ..	" 70 Mathuri Mahäl ..	19,360	472	377	82	68	..	..	..	..
" 26 ..	" 71 Filkhana Mahäl ..	47,795	612	544	307	234	..	..	..	..
" 27, 27A	" 72 ..	620,300	1,383	397	478	188	50	23	..	..
Ward no. VI ..	Collectorganj ..	6,959,777	17,148	10,596	4,157	2,756	177	124	81	71
Circle no. 1 ..	Chak no. 73 Collectorganj ..	84,458	1,148	165	79	8	..	..	..	..
" 2 ..	" 74 ..	58,080	1,286	833	59	19	..	..	..	..
" 3 ..	" 75 Ranjit Purwa ..	43,560	1,079	688	105	75	..	..	..	..
" 4, 5 ..	" 76 Cocho Bazar ..	61,710	1,915	1,347	454	325	..	..	29	36
" 6 ..	" 77 Anwarganj ..	64,785	729	398	432	324	..	..	7	..
" 7 ..	" 78 ..	62,030	1,001	784	159	108	..	..	..	..
" 8 ..	" 79 ..	121,121	678	483	422	283	..	..	..	..
" 9 ..	" 80 Anwarganj Cou-perganj ..	151,976	858	609	388	284	..	..	2	..
" 10 ..	" 81 Butcher Khana Kalan ..	50,265	570	356	608	472	..	1	10	7
" 11 ..	" 82 Chingighar Cou-perganj ..	601,470	341	151	61	48	3	..	..	..
" 12, 13	" 83 Jubi Khurd ..	1,346,972	1,300	889	379	272	74	53	13	10
" 14, 18	" 84 ..	2,681,393	1,596	966	370	188	59	40	10	11
" 15 ..	" 85 Lachhmi Purwa ..	667,893	2,572	1,692	352	208	36	29	10	7
" 16 ..	" 86 Rai Purwa ..	581,848	1,281	745	209	108	..	..	..	..
" 17 ..	" 87 Sitamau ..	886,886	754	490	80	39	5	1	..	..

—(continued).

Density per acre.	Proportion of women to 1,000 men (all religions).	Number of structural houses in circle.	Normal population of circle.	Number of persons per structural house.	Number of com-mensal families.	Average number of persons in family.	Percentage of population living in -					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over.	
12	13	14	15	16	17	18	19	20	21	22	23	24
166	729	2,206	20,291	9.2	5,899	3.4	50½	28½	10½	5	6½	
209	764	237	1,728	7.8	542	3.2	49½	27	15	5	3½	
262	875	140	1,050	7.5	333	3.1	91	5	4	..	..
266	820	201	1,809	9.4	609	3.1	76	10½	4½	3	..	
97	781	52	1,221	23.5	294	4.2	29	30	17	9	15	
31	541	49	791	16.1	204	3.8	25½	29	7	11	27½	
168	652	153	1,494	9.7	402	3.2	61	25½	9½	..	4	
100	615	72	737	10.2	198	3.7	40½	43	6½	5	5	
165	678	204	2,755	13.5	787	3.5	60½	24½	6½	2	6½	
248	654	181	1,925	10.1	539	3.9	53	28	11	4	4	
203	768	205	1,368	6.6	439	3.1	26	46	15	11	2	
257	677	247	1,547	6.3	524	2.9	51½	33	13	2½	..	
296	852	414	3,365	8.1	891	3.8	25	47	21	5	2	
202	689	101	1,011	10.0	277	3.7	68	15	6	6	5	
126	661	1,719	12,720	7.4	3,986	3.2	49	26	10½	6½	8	
111	680	151	937	6.4	269	3.6	43	30	10½	6	10½	
124	693	129	868	6.7	226	3.8	55	16½	7	8	13½	
161	561	284	1,095	3.8	354	3.1	35	29	22	12½	1½	
100	483	99	824	8.3	209	3.9	38	24½	9½	10	18	
170	840	253	1,649	6.6	516	3.2	93	6	1	..	..
71	427	70	543	7.7	149	3.7	20	34½	16	5½	24	
36	313	34	266	7.8	70	3.8	18	32	28	17	5	
37	191	18	179	9.9	85	2.1	42½	6½	15	10	26	
40	346	39	187	4.8	78	2.4	24½	37½	24	7	7	
89	530	138	588	4.2	225	2.6	54	20	9	8	9	
178	580	74	588	7.9	148	4.0	72	20	..	3	5	
222	767	13	1,318	10.1	413	3.2	54	39	4	1	2	
253	824	192	1,937	10.0	608	3.2	60	34	2	3	1	
183	799	172	1,237	7.2	472	2.6	66½	31½	2	..	..
78	7.8	53	474	8.9	161	2.8	50	30	8	4	2	
85	699	2,431	19,235	7.9	6,399	3.0	79	16	4	1	..	
178	801	192	1,505	7.8	511	2.9	85	10	3	1	1	
163	735	194	1,497	7.7	516	2.9	68½	24½	6	..	1	
141	675	87	1,058	12.1	328	3.2	57	30½	11½	1	..	
235	832	245	2,694	11.0	805	3.1	85	19	2	..	1	
212	745	294	2,535	8.6	798	3.2	80½	11	1	1½	..	
240	839	301	2,129	7.1	686	3.1	84½	12½	2	1	..	
140	611	126	752	6.0	265	2.9	88	9	1	1	1	
160	743	182	1,237	6.8	404	3.1	82½	13	4½	..	..
210	821	218	1,797	8.2	617	2.9	84	14	..	1	1	
250	808	98	1,003	10.2	324	3.1	77	20	3	..	..
172	846	143	1,793	12.5	592	3.0	82	12½	5½	..	..
19	292	351	1,285	3.5	493	2.5	71	21½	5	1½	1	
24	628	3,418	33,470	9.8	11,270	2.9	55	29	8½	4½	3	
80	141	41	646	16.2	353	1.8	55½	32½	7	5	..	
183	633	258	2,357	9.2	854	2.8	65	18	8	4½	4½	
216	644	233	1,818	7.7	640	2.8	60	28½	7	2½	2	
322	712	569	4,195	7.4	1,323	3.2	41	30	12	12	5	
141	618	159	1,755	11.0	545	3.2	38½	88	8½	7	8	
191	769	252	2,052	8.1	605	3.1	56	30½	8½	3	2	
75	696	128	1,943	15.1	629	3.1	47	34	11	5	3	
68	715	80	2,055	25.7	608	3.4	69	17	4	2	8	
174	703	219	1,832	8.4	540	3.4	41	39	14	5	1	
5	491	149	607	4.0	238	2.5	71	15	9½	4½	..	
10.7	692	397	2,577	6.5	845	3.0	78½	17	2½	2	..	
5.7	612	187	3,018	16.1	1,036	2.9	42	40	12½	3	2½	
38	652	331	4,906	14.8	1,715	2.9	60	27	6½	3½	8	
20	533	225	2,438	10.8	876	2.8	59	25	8½	4½	3	
17	632	190	1,271	6.7	403	3.1	43	39	5½	4½	8	

—(concluded).

Density per acre.	Proportion of women to 1,000 men (all religions).	Number of structural houses in circle.	Normal population of circle.	Number of persons per structural house.	Number of communal families.	Average number of persons in family.	Percentage of population living in—					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over.	
12	18	14	15	16	17	18	19	20	21	22	23	24
45	710	3,602	46,216	12.8	13,278	3.5	66	27½	6½	2½	3½	
93	664	323	4,054	14.4	1,397	3.3	53	30	8	2	1	
61	693	211	2,581	12.2	863	3.0	84	13	2	1	..	
119	791	71	2,184	30.8	715	3.0	99	1	..	..	..
147	782	145	1,821	12.6	473	3.8	51½	39	5½	1	3	
180	745	240	1,671	7.0	493	3.4	88½	11½	..	..	..
165	819	221	2,316	10.6	648	3.6	59	32½	6½	2	..	
194	723	123	1,024	8.2	271	3.8	45	36	7	5	7	
932	681	31	2,850	91.9	698	4.1	35	41	19	3	2	
22	539	106	1,886	17.8	450	4.2	52½	20½	8½	2½	16	
77	602	5	1,176	235.2	274	4.3	74	13½	3½	5	4	
53	699	4	1,087	272.0	320	3.3	83	13	4	..	..
171	735	461	4,631	10.0	1,304	3.5	54½	20	10½	5	4	
195	696	475	3,824	8.1	1,193	3.2	69½	26	3½	1	..	
185	701	357	7,031	19.7	2,121	3.3	85½	11	2	1½	..	
261	725	180	1,937	10.8	432	4.5	28	22	16	9	25	
127	685	251	2,386	9.5	698	3.4	33	38½	18	5½	5	
9.7	735	367	2,129	5.8	617	3.5	90½	4½	3	2	..	
2.6	664	31	1,028	33.1	305	3.3	100	..	..	..	..
NOW.												
16	897	9,416	22,752	2.4	5,749	4.0	22	33	27	15	9	
63	925	555	1,783	3.2	379	4.7	10	33	25	23	9	
66	897	564	1,652	2.9	442	3.7	15½	20	23	15½	26	
45	1,027	403	1,091	2.7	253	3.3	10	24	27	13	20	
12	884	620	1,571	2.6	363	4.3	24½	53	8	11	3½	
18	927	447	1,107	2.5	289	3.8	17½	38	28½	13	3	
5	946	458	1,295	2.8	274	4.7	14	33	13	31	9	
32	772	1,050	2,249	2.1	561	4.0	26	36	24	11	3	
28	894	444	624	1.4	237	2.6	9	29	23	11	28	
40	1,007	527	1,168	2.2	289	4.0	30½	23	23	17½	6	
68	928	557	1,088	3.0	385	4.4	10½	21	22	19	27½	
4	844	440	8.4	2.0	285	3.0	35	52½	4½	6	2	
8	860	467	1,191	2.5	330	3.6	47	37	10	4	2	

Census number.	Name of constituent ward and mohallas.	Area in square yards.	Population.							
			Hindus.		Muhammadans.		Christians.		Others.	
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
Circle no. 14	Mosahibganj and Purwa Lodh; Baratkhana Jadid, Chamar Tolia, Gali Mahgoo Bog, Baratkhana Kalan and Baghia Misri, Purwa Lodh, Baratkhana Khurd.	600,644	382	372	292	246	..	..	..	..
" 15	Muftiganj and Chaoni, Gurji Bog, Khirki Naqiji and Ahata Mubarak, Khirki, Muftiji, Gali Ghisa.	150,040	65	54	400	432	..	..	..	..
" 16	Daulatganj, Sheopuri, Murghkhana, Nai Basti and Brahmani Tola, Jhankar Bagh and Kawangar Bagh.	165,528	238	198	223	179	..	..	..	..
" 17, 18 & 19	Husainabad, Ramganj .. Peer Bokhara, Ahata Sitara Bogam, Garhi Naim Khan, Ahata Mirza Ali Khan, Tashinganj.	401,430 420,886	315 123	239 108	805 305	708 320	1 ..	.. ..	2 ..	2 ..
" 20	Faqir Ullahganj, Nagaryan ...	443,586	311	265	149	112	..	..	..	..
"	Saadatganj Ward ..	4,917,925	6,002	5,200	3,795	3,768	9	1	13	10
" 1	Pul Ghulam Hussain, Kashmiri Mohalla, Hasan Puria.	176,321	233	194	404	384	..	..	..	..
" 2 & 3	Rustamnagar, Maidan Elich Khan, Fazilnagar, Kachcha Bagh, Purana Chabootra.	501,521	563	473	804	811	..	..	..	..
" 4	Chauni Husain-ud-din Khan, Noor Bari, Dariba Gari Adda, Sultanpur.	9,874	255	226	345	370	..	..	2	..
" 5	Bibiganj, Ahata Noor Bog, Kharhai, Tikri Khurd.	19,844	318	250	245	233	..	1	..	..
" 6	Chob Mandi, Bogam Bagh, Kishorganj, Baoli, Mohammadganj.	13,600	645	569	83	76	..	..	..	..
" 7 & 9	Alamnagar, Mahdikhora, Pasrehta, Fatahabadi, Gihai, Samrahi, Hassanganj.	1,038,228	1,001	836	263	238	5	..	5	6
" 8	Beharipore, Zaffarpur, Ruknuddinpur, Daryapur and Talkta.	887,995	358	321	61	59	2	..	3	2
" 10 & 11	Baoli Basar, Bilwari, Saadatganj, Mubarak, Sarni Moghal, Sarni Andruni.	967,129	612	531	147	122	2	..	3	2
" 12	Katra Khudiyar Khan, Ahata Dhamnoo Bog, Serkawali gali.	220,898	270	243	272	306	..	..	..	..
" 13 & 14	Mansooranagar, Nowbasta ..	278,736	541	437	755	786	..	..	..	..
" 15	Brahmi Tola, Purwa Lodh, Timaniganj, Menhdiganj.	229,561	417	391	177	145	..	..	..	..
" 16	Bhawaniganj, Tikaitganj ..	394,412	411	391	166	180	..	..	..	..
" 17	Sitaljee with population of Talab Tikait Rai, Nanda Khara urf Suppa, Raos, Bhadowan.	179,806	378	338	73	58	..	..	..	..
"	Chauk Ward ..	907,742	4,814	4,175	4,518	4,436	83	56	100	40
" 1	Mirza Mandi, Bagh Maha Narain, Chakla.	40,850	7.9	653	88	78	7	3	7	7
" 2 & 3	Basar Kalka, Chah Dahla, Kooncha Raja Tipar Chand, Chori Wali Gali, Sarangi Tola, Deorhi Raja Ram Dayal.	40,559	1,211	1,116	74	64	15	25	51	21
" 4 & 5	Bahoran Tola, Sankari Tola, Kalia Tola, Chaupari Tola, Phool Wali Gali, Pul Gama, Sabzi Mandi, Chobdari Mohalla, Sirai Tahsin.	73,328	774	640	527	540	8	28	33	8

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Density per acre.	Popula- tion of women to 1,000 men (all reli- gions).	Number of struc- tural houses in circle.	Normal popula- tion of circle.	Number of per- sons per struc- tural house.	Number of com- mensal families.	Average number of per- sons in family.	Percentage of population living in—					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over.	
12	13	14	15	16	17	18	19	20	21	22	23	24
10	918	525	1,187	2.1	283	4.1	16½	29	31	14	6½	
31	1,045	330	921	2.8	203	4.5	11	53	18	13	2	
25	818	307	800	2.6	205	3.9	26½	26½	30½	16½	..	
25 10	845 1,000	1,061 402	1,954 784	1.8 1.9	569 187	3.4 4.2	40½ 20	31 25	16½ 26	9 18½	3 10½	
9	819	259	822	8.2	215	3.8	7	40	31	17½	4½	
19	914	8,116	18,692	2.3	1,628	4.0	15	29½	23	16½	16	
33	907	447	1,207	2.7	303	4.0	17	27	20	17	19	
26	939	1,069	2,597	2.4	615	4.2	12½	31	25	14½	17	
587	990	474	1,178	2.5	269	4.4	4	17	32	37	10	
255	859	457	1,031	2.2	282	3.7	21	41	18	14	6	
488	886	552	1,396	2.5	359	3.9	13½	46	23	9½	8	
11	848	963	2,248	2.3	586	3.8	15	23	26	17	19	
5	901	425	840	2.0	223	3.8	34	30	21	12	3	
7	857	865	1,378	1.6	373	3.7	20	31	15	16	18	
24	1,013	495	1,184	2.3	250	4.5	21½	36	17	17½	8	
44 24	943 908	991 440	2,527 1,161	2.5 2.6	526 297	4.8 3.9	9 12	25 35	29 23	16 17	21 13	
14 23	989 878	505 433	1,134 871	2.2 2.0	299 246	3.8 3.5	18 21	36 10	21 18	14 12	11 39	
97	919	7,723	18,977	2.5	3,831	5.0	31	29	15	12	13	
191	851	507	1,582	3.1	310	5.1	29	26	22	13	10	
308	907	949	2,530	2.7	505	5.0	17	20	14½	16	32½	
169	906	964	2,995	3.1	533	5.6	49	32	5	3	11	

Census number.	Name of constituent ward and mohallas.	Area in square yards.	Population.							
			Hindus.		Muhammadans.		Christians		Others	
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
	<i>Sa'adatganj Ward—(conld.).</i>									
Circle no. 6	Mahmoodnagar	77,827	84	60	665	657	..	..	..	..
" 7	Takya Bhatyaryan, Shahganj	91,040	203	198	441	510	..	..	1	2
" 8	Ahata Sangi Beg..	208,749	560	500	227	202	..	..	..	..
" 9 & 10	Ashrafabad, Bazar Khala, Abata Kusim Khan, Lakur-mundi, Haidarganj, Kadim Khirkee, Baijoo Bhola.	201,150	823	765	723	684	..	..	2	..
" 11	Haidarganj Kadim, Nakhus, Gali Hammam.	82,280	67	45	433	441	1	..	2	..
" 12 & 13	Chauk Khas, Victoria Park and Golderwaza, Ghairai and Kotwali, Jauhari mohalla.	37,704	256	121	653	634	1	..	..	..
" 14	Gali Paroha, Sarai Haran, Firangi Mahal, Dallali Mohalla.	33,444	27	11	319	278	1	..	4	2
" 14	Taksal, Sarai Beoch, Katra Sayed Husain Khan, Akbari Darwaza, Sarai Gaddha, Khaki Tola, Sarai Bans.	20,613	60	66	363	348	..	..	..	..
	<i>Yahiaganj Ward</i>	11,371,822	10,906	8,634	8,403	7,587	42	33	61	41
" 1	Machhli Bhawan, Imam Bara Agha Baqar, Dorwali Gali.	840,903	308	147	457	342	14	15	..	..
" 2	Imam Bara Baqar, Gali Shah Chura, Korewali Gali, Thawai Tola, Chau Kankar.	12,923	144	79	841	796	..	..	3	1
"	ata Nala, Daryai Tola, Chirimar Tola, Katra Post Mohammad Khan, Thantheri Tola.	18,215	97	109	549	526	2	..	1	..
" 4	Bazar Raja with Keeli Tola, Hastogi Tola, Punjabee Tola.	84,086	647	525	197	184	..	..	..	..
" 5	Bagh Makka, Ghazi Mandi, Banjari Tola	85,765	126	122	683	664	..	..	..	..
" 6	Beganganj and Sobatia Bagh.	40,995	718	516	316	405	..	..	..	..
" 7	Bagh Qazi, Katra Aboo Turab Khan.	61,904	113	83	853	851	2	2	..	..
" 8 to 10	Atkee Mohalla, Bagh Laljee, Yahiaganj, Nadan Mahal.	181,984	1,212	1,086	480	453	..	..	..	..
" 11 to 12	Bagh Molvi Anwar, Ahata Khansama, Terhi Bazar and Bhus Kandi	108,319	691	611	582	479	4	4	5	4
" 13	Rakabganj Kadim Chamara Tolia Yahiaganj .. Lakarmanoi .. Astabal ..	12,197	514	497	376	345	..	..	3	5
" 14 to 15	Kundri, Allanganj, Pandeyganj, Bihana, Purwa Khas Kallan, Mazra Dogwan.	2,568,240	1,317	1,114	239	209	..	..	13	8
" 16	Tikaiganj, Nawabganj ..	111,078	497	413	253	321	..	..	4	7
" 17	Katra Mir Jahangir, Victoriaganj, Hospital Shahi, Toriaganj, Khairat Khana Shahi, Katra Azam Beg.	101,950	124	97	612	530	..	..	..	..
" 18	Sarai Agha Meer, Billochpura, Kasai Bara.	40,317	66	68	649	608	19	11	..	..
" 19, 20, 25 & 26	Bhadowan, Aish Bagh, Khajwa.	2,508,330	1,679	1,201	774	579	1	1	1	1
" 21 & 22	Ahata Shaikhau Mazra Dogawan, Chamar Tolia, Mazra Dogawan Purwa Khawas Khurd, Chamaran Khern, Raza Bagh, Shamsuddin Khera, Naka Hindola, Chak Mufai Dogawan, Sital Khera and Newas Khera, Chitta Khera, Mazra Dogawan.	97,478	1,198	918	224	137	31	16

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Density per acre.	Popula- tion of women to 1,000 men (all reli- gions).	Number of struc- tural houses in circle.	Normal popula- tion of circle.	Number of per- sons per struc- tural house.	Number of com- munsal families.	Average number of per- sons in family.	Percent-ge of population living in—					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over.	
12	13	14	15	16	17	18	19	20	21	22	23	24
90	984	468	1,414	3.0	279	5.0	8	22	17	24	29	
72	1,101	507	1,291	2.5	289	4.5	15	31	23	27	4	
35	892	516	1,148	2.2	229	5.0	14	17	18	15	36	
72	983	1,281	3,569	2.9	715	5.0	36	35	17	9	3	
58	966	541	1,123	2.0	224	5.0	20	19	19½	23½	8	
214	830	1,180	1,447	1.2	373	3.9	41	37	12	5	3	
93	8.9	390	1,097	2.8	183	6.0	54½	37	6	1½	1	
195	978	430	788	1.8	191	4.1	44	27	17	11	1	
15	839	13,288	43,350	3.3	8,311	5.2	20	30½	22	15½	12	
7	648	416	1,196	2.9	300	4.0	17½	36	15	12½	19	
688	912	494	1,670	3.4	320	5.2	14	37	33	5	11	
76	978	527	1,350	2.6	303	4.5	21	52	13	10	4	
92	840	552	1,961	3.6	325	6.0	15	21	10	20	34	
90	972	428	1,629	3.8	275	6.0	4	44	39	11	2	
231	899	588	2,321	3.8	400	5.7	13	50½	23	13	1½	
149	967	593	1,780	3.0	341	5.2	17½	33	38	11	½	
86	909	1,314	5,081	3.8	651	7.8	7	19	23	25	26	
106	895	1,145	3,110	2.7	558	5.6	44	14	18	15	9	
690	948	552	2,247	4.0	367	6.1	10½	39½	23	23	4	
6	848	1,034	4,774	4.5	784	6.0	11	40	20	15	14	
61	850	545	2,039	3.7	353	5.8	21	27½	22½	18	11	
60	852	505	1,540	3.0	276	5.6	15½	24	35	22½	3	
170	929	474	1,118	2.4	295	3.8	13	20½	22½	25	13	
8	726	1,838	5,668	3.0	1,210	4.7	25	21½	23	15	15½	
125	736	996	2,792	2.7	672	4.0	38	37	18	5	2	

Census number.	Name of constituent ward and mohallas.	Area in square yard.	Population.							
			Hindus.		Muhammadans.		Christians.		Others.	
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11
Circle no. 23 ..	Yahiaganj Ward—(conld.). Khara Lokia Chaukidar, Mawaya Khas, Koryan Khara.	231,739	710	442	224	187	..	..	..	..
" 24 ..	Harchandpur Kanora, Purwa Hasan Khara and Bagh Darogha Ashiq Ali, Karehta, Chitta Khara, Mazra Karehta, Talab Pandey, Mirza Khara, Mazra-Karehta.	4,198,990	769	613	91	71	..	..	..	..
" 1 ..	Wasirganj Ward .. Khas Bazar, Makan Tahsil, Lucknow and Balrampur Hospital.	7,039,489 552,970	11,106 220	8,635 74	11,134 95	9,344 42	207 19	198 19	67 1	44 ..
" 2, 3, 12 ..	Khalayak Bagh and Police Hospital, Peer Jilil includ- ing Inayat Bagh.	885,333	1,293	1,057	1,148	1,032	70	101	1	2
" 4 ..	Golaganj ..	1,894,473	298	209	599	522	14	13	..	..
" 5 ..	Farudkhana, Khima Dozan, Pul Komharan, Takia Azam Bagh.	78,795	520	455	388	387	..	..	..	..
" 6 ..	Wasirganj, Ghausganj and Baghia Ghazi.	131,551	186	102	744	600	..	..	2	2
" 7, 8 ..	Garhia Chaudhri, Nalband Tola, Bawarchi Tola, Peel- khana, Thathori Tola, Pura Tola, Doorhi Agha Meer with city railway station Johi Tola, Bagh Shorganj.	130,052	942	463	1,350	947	8	10	17	1
" 9 ..	Mashugganj, Murgkhana, Agha Meer, Khatri Mohalla, Kashi Dera, Nai Basti, Farashkhana.	122,888	601	531	520	471	..	..	10	9
" 10 ..	Ahata Durga Prasad, Sobhan- nagar, Tazikhana.	48,594	507	495	379	351	..	..	..	..
" 11 ..	Chik Mandi ..	30,928	110	97	500	431	..	..	..	..
" 12 ..	Ahata Faqir Mohammad Khan Kham, Ahata Faqir Mo- hammad Khan Fukhta.	156,913	205	184	505	406	8	7	..	..
" 14, 15 ..	Mauliganj ..	83,926	635	489	1,072	923	1	..	9	9
" 16 ..	Amaniganj, Rakabganj, Lash- kari, Chauk Bazar, Bhoosa Mandi, Charas Mandi.	58,709	642	548	334	307	..	1	4	4
" 17 ..	Jangliganj ..	33,348	407	333	312	313	..	..	1	..
" 18 ..	Chamar Hatta, Ahata Shai- khan pertaining to Dogawan, Fatehganj, Terhi Bazar.	282,027	609	495	352	312	..	..	10	7
" 19, 20 ..	Bathkhana Dogawan, Ghaus- nagar including Birhan Godhan Tola, Gwynne Tola.	50,142	60	548	641	626	..	..	..	..
" 21 ..	Mauza Dogawan ..	2,038,105	427	404	21	18	..	..	4	2
" 22 ..	Khialiganj ..	98,058	455	333	515	470	11	14	4	..
" 23 to 25 ..	Bashiratganj, Aminabad, Nazirabad.	148,201	1,257	803	953	586	69	27	4	8
" 26 & 27 ..	Durbijaganj, Ganeshganj ..	121,581	844	690	183	151	3	3	..	..
" 28 ..	Astabal Char Bagh ..	90,945	348	319	523	419	4	3	..	..
Circle nos. 1, 2 ..	Ganeshganj Ward .. Ghasiyari Mandi, Bagh Munoo Khan.	2,392,552 212,180	11,262 741	8,409 626	6,527 460	5,428 424	608 123	562 125	224 4	123 ..
" 3 to 5 ..	Zamboorkhana, Talab Gangi Shukul, Chirandha Purwa.	386,910	1,253	1,104	1,468	1,350	91	107	11	2
" 6 to 8 ..	Tilpurwa, Ganeshganj, Tophkana, Char Bagh.	121,581	2,051	1,471	232	170	10	5	78	37
" 9, 10 ..	Aminabad Nazirabad ..	148,201	446	215	266	157	5	..	9	2
" 11, 12 ..	Nayagaon ..	184,643	464	339	768	661	15	7	..	..
" 13 ..	Bhoosa Mandi, Amaniganj ..	58,709	375	291	551	538	..	..	..	..
" 14 to 16 ..	Beruni Khandaq ..	88,669	1,103	818	652	571	7	6	2	3
" 17, 25 to 27 ..	Kaisar Bagh, museum of Kaisar Bagh, Rakabganj Jadid, Balidari Lane.	591,410	1,410	863	1,025	599	237	501	24	6
" 18 to 22 ..	Maqboolganj ..	211,266	2,628	2,096	717	645	26	19	66	53
" 23, 24 ..	Kandhari Bazar ..	694,927	498	380	355	296	68	61	30	21
" 25 ..	Safdar Bagh ..	94,041	299	208	38	22	20	31

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Density per acre.	Popula- tion of women to 1,000 men (all re- ligions).	Number of struc- tural houses in circle.	Normal popula- tion of circle.	Number of per- sons per struc- tural house.	Number of com- munsal families.	Average number of persons in family.	Percentage of population living in --					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over.	
12	13	14	15	16	17	18	19	20	21	22	23	24
33	669	558	1,581	2.8	440	3.6	52½	36	10	1	½	
18	795	669	1,553	2.8	435	3.6	34	22	21	16	7	
29	795	13,058	35,612	2.7	8,516	4.2	21½	28	20	14	16½	
4	403	72	338	4.7	140	2.4	74	10	5	7	4	
26	876	1,157	4,218	3.6	949	4.4	19	36	18	10	17	
4	817	537	1,552	2.9	326	4.8	26	10	13½	15½	35	
107	927	558	1,353	2.4	313	4.3	23	30	24	..	23	
60	755	511	1,370	2.7	299	4.6	22	34	17	10	17	
133	613	1,002	3,067	2.9	757	4.0	29	26	16	12	17	
87	857	509	1,978	3.5	443	4.5	20	23	20	13	24	
178	891	544	1,690	3.1	377	4.5	3½	23	19	28½	26	
178	866	411	1,120	2.7	234	4.8	12	36	30	15	7	
42	767	418	1,198	2.9	297	4.0	17	31	12	14	26	
181	828	1,122	2,935	2.6	709	4.1	16	23	21	23	18	
152	877	517	1,501	2.9	347	4.3	37	25	13½	10½	14	
198	897	514	1,335	2.6	290	4.6	16	30	32½	8½	13	
32	789	506	1,798	3.2	401	4.5	5	24½	31	26½	13	
240	902	747	2,402	3.2	553	4.3	20	32	25	13	10	
2	938	295	737	2.5	195	3.8	22	23	33	13	9	
89	828	505	1,173	2.3	299	4.0	52	25	7	11	5	
121	624	1,494	2,670	1.8	738	3.6	19	41	16	13	11	
75	825	902	1,640	1.8	513	3.2	39	36	12	6	7	
82	881	557	1,537	2.8	336	4.6	14½	25	23½	18	19	
65	796	11,378	29,636	2.6	7,582	3.9	47	27½	12	5½	8	
57	885	858	2,367	2.7	703	3.4	48	32	12	6½	1½	
67	908	1,093	5,034	3.0	1,212	4.2	41½	38	11½	5	4	
161	709	1,322	3,476	2.6	842	4.1	16	27	21	15	21	
36	515	716	726	1.0	205	3.5	36	43	11	10	1	
59	807	800	2,236	2.8	462	4.8	36	29	17	6	12	
144	830	552	1,652	3.0	381	4.3	61	30	6	1	2	
178	790	1,190	3,171	2.7	722	4.4	32	23	14½	7	23½	
77	780	1,154	2,925	2.5	872	3.4	59	23	10	3	5	
143	819	2,240	5,926	2.6	1,545	3.8	67	22	7½	1½	2	
12	805	630	1,539	2.4	472	3.3	59	21	7½	3½	9	
82	728	223	584	2.6	166	3.5	63½	21	7	4½	4	

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—(concluded).

Density per acre.	Popula- tion of women to 1,000 men (all reli- gions).	Number of struc- tural houses in circle.	Normal popula- tion of circle.	Number of per- sons per structu- ral house.	Number of coin- mensal families.	Average number of per- sons in family	Percentage of population living in—					Remarks.
							1 room.	2 rooms.	3 rooms.	4 rooms.	5 rooms and over	
12	13	14	15	16	17	18	19	20	21	22	23	24
15	749	8,891	22,399	2.5	6,591	3.4	54	19	11	7	9	
102	864	1,949	4,712	2.4	1,172	4.0	24	24	20	17	15	
27	748	600	1,446	2.4	382	3.7	47	4	17	11	21	
84	814	1,703	3,949	2.3	1,301	3.0	66	23	6	2	3	
9	545	1,075	3,291	3.1	1,126	2.9	73	14	6	2	5	
1	472	98	290	2.9	123	2.3	82	2	1	8	7	
42	841	701	2,140	3.0	620	3.4	76	20	4	..	..
3	623	255	675	2.6	188	3.5	63	23	9	..	..
28	903	192	442	2.3	134	3.3	47	17	9	10	17	
5	904	312	713	2.2	190	3.7	59	30	8	3	..	
5	540	323	679	2.1	212	3.2	80	16	4	..	..
144	793	1,683	4,062	2.4	1,143	3.5	43	16	16	12	13	
7	683	6,119	13,013	2.1	3,868	3.1	59½	23	10	5	2½	
5	885	619	1,722	2.7	485	3.6	50½	34½	10	5	..	
3	789	753	1,323	1.8	319	3.8	40	33	11½	10½	5	
13	682	1,470	2,333	1.6	752	3.0	88	9	1	½	1½	
23	831	511	1,452	2.8	407	3.6	65	20	10	3	2	
8	597	2,736	6,163	2.3	1,875	3.3	54	23	13	7	3	

MUNICIPAL OCCUPA

Serial number.	Name of ward.	Grand Total.				Ordinary cultivation.				Growers of special products, market gardening.				Forestry.			
		Totals.	Males.	Females.	Dependents.	Totals.	Males.	Females.	Dependents.	Totals.	Males.	Females.	Dependents.	Totals.	Males.	Females.	Dependents.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ALLAHABAD																	
1	Civil Lines ..	17,041	6,264	1,542	9,235	1,289	200	51	1,038	1	1	..	..	5	8	1	..
2	Katra Colonelganj	22,086	7,511	2,559	12,216	5,626	997	794	1,835	6	..	2	4	1	1	..	..
3	North kotwali ward	30,343	10,316	2,856	17,171	1,710	434	100	1,116	130	22	16	92	..	..	..	..
4	South kotwali ..	36,633	13,159	3,984	19,490	3,064	1,144	341	1,579	..	..	..	..	..	..	..	..
5	Moothiganj	21,406	7,583	2,330	11,493	1,687	673	278	736	19	4	..	15	..	..	..	..
5	Kydganj																
6	Daraganj ..	12,266	4,459	1,441	6,366	1,778	753	237	788	111	22	8	81	..	..	..	..
7	East Indian Rail- way settlement.	5,830	2,828	360	2,642	807	406	102	209	45	29	..	16	..	..	..	..
CAWNPORE																	
1	Civil Lines ..	31,676	14,044	995	16,634	1,752	503	144	1,105	22	13	..	9	1	..	..	1
2	Patkapur ..	21,436	7,917	993	12,526	515	123	18	371	83	32	2	49	2	1	..	1
3	Moolganj ..	20,631	8,267	1,331	10,833	851	363	77	411	130	21	27	82	..	..	..	..
4	Nayaganj ..	14,101	6,308	676	7,117	458	103	14	231	5	4	..	1	..	..	..	..
5	Sadar Bazar ..	21,059	8,763	1,785	10,511	851	436	44	371	..	..	..	..	..	..	..	..
6	Collectorganj ..	35,110	14,140	2,400	18,570	1,247	915	104	228	17	7	..	10	..	..	..	..
7	Anwarganj ..	47,572	20,280	3,254	24,038	1,033	299	61	673	50	4	6	40	..	..	..	..
8	East Indian Rail- way settlement.	3,300	1,801	178	1,526	220	120	6	94	..	..	..	..	..	..	..	..
LUCKNOW																	
1	Daulatganj ..	22,837	9,113	2,803	11,921	2,417	925	764	726	..	..	..	..	..	..	..	..
2	Ba'adatganj ..	18,798	7,032	2,513	9,253	1,864	700	399	765	..	..	..	..	..	..	..	..
3	Chauk ..	18,172	6,281	1,276	10,615	827	242	50	535	8	2	3	3	..	..	..	..
4	Yahiaganj ..	35,707	14,085	4,858	16,764	2,684	998	633	1,053	..	..	..	..	..	..	..	..
5	Wazirganj ..	41,035	14,650	3,413	22,972	1,803	664	148	996	23	10	..	13	10	2	..	8
6	Ganesbaganj ..	33,443	14,053	1,381	17,809	679	284	25	370	35	10	..	25	33	2	..	31
7	Hasratganj ..	26,324	10,433	1,683	14,208	541	188	79	270	256	219	..	87	4	..	..	4
8	Hasanganj ..	16,187	6,783	1,579	7,815	1,278	441	197	640	60	..	1	59	..	..	..	..
9	Railway settlement	3,664	1,741	96	1,827	316	148	..	168	8	..	..	8	..	..	..	..

Raising of farm stock.				Raising of small animals.				Fishing and hunting.				Mines.				Quarries o' hard rock.				Salt, etc.				
Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Serial number.
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	1
MUNICIPALITY.																								
140	51	21	08	9	3	2	4	1
13	13	20	6	4	10	2
106	80	..	20	3
578	268	..	310	4
125	77	..	48	5
196	108	..	88	6
75	54	..	21	7
MUNICIPALITY.																								
218	27	15	176	10	10	4	3	..	1	1
36	4	3	49	3	3	5	5	2
7	3	..	4	10	10	22	10	..	12	3
14	6	..	8	11	6	1	4	4
16	4	4	8	5
68	10	8	50	4	4	6
67	33	3	31	13	10	..	3	7
4	2	..	2	8
MUNICIPALITY.																								
..	5	1	..	4	1
..	19	14	..	5	2
..	3
..	4
..	5
..	79	54	..	25	6
..																		

MUNICIPAL OCCUPA

Serial number.	Name of ward.	Textiles				Hides, skins and hard materials from the animal Kingdom.				Wood.				Metal.			
		Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.
1	2	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
ALLAHABAD																	
1	Civil Lines ..	85	26	5	54	51	24	3	24	268	112	6	150	178	33	67	78
2	Katra, Colonelganj	87	49	..	58	31	2	..	29	281	67	..	214	269	81	..	188
3	North kotwali ward	142	59	11	72	26	16	..	10	376	124	..	252	505	168	..	337
4	South kotwali ..	536	223	30	283	134	60	..	74	487	319	..	168	513	192	1	320
5	Moothiganj ..	304	157	11	136	87	28	..	59	230	104	..	126	497	214	..	283
	Kydganj ..																
6	Daraganj ..	242	127	..	115	..	..	..	..	203	114	..	89	363	123	..	240
7	East Indian Rail- way settlement	165	111	..	54	..	..	..	..	75	48	..	27	67	20	5	42
CAWNPORE																	
1	Civil Lines ..	1,780	875	60	845	719	408	3	248	363	236	..	127	118	57	..	61
2	Patkapur ..	368	136	2	231	207	71	1	135	508	237	1	270	554	290	2	202
3	Mobiganj ..	298	91	..	207	551	199	1	351	200	102	..	98	360	147	..	208
4	Nayaganj ..	58	23	1	34	7	2	..	5	159	62	..	97	335	185	2	198
5	Sadar Bazar ..	131	76	..	55	49	1	..	48	367	339	..	328	343	107	20	216
6	Collectorganj ..	501	155	134	212	741	302	..	439	375	146	..	229	1,116	528	2	586
7	Anwarganj ..	1,856	851	71	984	1,638	733	7	898	719	327	..	392	955	416	..	539
8	East Indian Rail- way settlement.	25	13	..	12	23	17	..	6	13	12	..	1	29	10	..	19
LUCKNOW																	
1	Daulatganj ..	522	309	30	183	32	11	..	21	271	139	4	128	77	15	..	62
2	Saadatganj ..	940	400	15	525	17	7	..	10	177	82	..	95	85	40	..	45
3	Chauk ..	473	76	93	304	22	6	..	16	276	110	..	166	51	28	1	27
4	Yahiaganj ..	26	24	..	2	52	41	..	11	525	226	7	292	372	172	1	199
5	Wazirganj ..	15	8	3	4	425	76	22	327	482	224	2	250	459	238	1	240
6	Ganeshganj ..	36	17	..	19	50	15	2	33	352	412	7	433	384	157	7	220
7	Hazratganj ..	15	10	1	4	7	5	..	2	569	266	7	276	473	189	10	271
8	Hassanganj ..	72	29	2	41	..	..	..	..	484	281	..	503	119	73	..	46
9	Railway Settlement	17	8	..	9	..	..	..	..	66	42	..	18	66	47	..	19

TIONAL TABLES.

Ceramics.				Chemical products properly so called and analogous.				Food industries.				Industries of dress and toilet-washing, cleaning and dyeing. Barbers, hairdressers and wigmakers				Furniture industries.				Serial number.
Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	
59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	1
MUNICIPALITY.																				
32	12	23	17	97	28	2	67	95	24	27	41	861	343	68	450	..	..	..	..	1
7	4	..	3	59	27	4	18	245	88	38	119	1,231	428	156	647	..	..	..	..	2
351	89	34	228	435	81	84	270	332	106	78	148	1,566	517	72	977	..	..	..	..	3
403	198	23	182	793	308	37	448	1,493	580	119	794	2,235	839	164	1,232	..	..	..	..	4
332	136	29	167	292	119	29	184	733	271	57	405	1,358	573	110	675	..	..	..	..	5
130	42	5	83	75	..	13	62	138	11	20	107	579	185	14	180	..	..	..	..	6
106	45	17	44	105	64	..	41	127	68	11	48	206	103	18	85	..	..	..	..	7
MUNICIPALITY.																				
160	57	2	101	378	53	30	192	583	154	28	391	3,336	1,526	120	1,690	40	31	..	9	1
80	29	1	50	70	9	3	58	251	45	89	167	2,121	871	64	1,186	7	..	..	7	2
61	2	9	50	155	30	7	118	504	210	15	279	2,231	1,012	145	1,074	..	..	..	..	3
9	1	3	5	76	14	..	62	190	53	42	95	557	220	57	280	..	..	..	..	4
54	21	14	19	403	142	46	215	316	110	55	151	1,063	413	81	569	..	..	..	..	5
309	104	83	122	58	32	..	26	677	190	91	396	2,631	1,074	164	1,393	..	..	..	..	6
217	59	65	93	156	45	15	98	368	132	19	217	4,816	2,639	284	1,893	..	..	..	..	7
12	4	..	8	16	16	..	1	10	5	..	5	79	56	2	21	..	..	..	..	8
MUNICIPALITY.																				
149	64	17	68	166	115	13	38	429	80	110	239	1,604	649	280	675	23	4	..	10	1
41	17	3	21	71	38	14	29	357	96	82	179	1,155	451	71	633	27	16	..	11	2
88	47	9	82	72	44	3	25	323	103	38	182	1,110	358	112	640	77	24	..	53	3
265	57	93	115	109	41	38	80	1,363	321	364	678	2,222	808	231	1,183	10	3	..	7	4
203	74	64	65	211	82	41	88	798	153	368	274	3,149	1,270	335	1,544	..	..	..	..	5
151	39	37	55	218	91	21	106	905	205	121	579	2,064	709	169	1,186	..	..	..	..	6
87	37	15	35	103	42	27	34	332	107	77	148	2,280	798	155	1,118	..	..	..	..	7
188	104	..	84	105	51	20	34	508	184	106	218	1,047	452	128	467	..	..	..	..	8
20	15	..	5	34	38	..	16	90	19	8	63	35	10	..	25	..	..	..	..	9

MUNICIPAL OCCUPA

Serial number.	Name of ward.	Building industries.				Construction of means of transport.				Production and transmission of physical forces (heat, light, electricity, motive power, etc.)				Painters, book-binders, etc., makers of musical instruments engravers, makers of watches, clocks and surgical instruments. Workers in various trades, scavengers and sweepers, etc.			
		Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.
1	2	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
ALLAHABAD																	
1	Civil Lines ..	..	..	..	..	15	8	..	7	28	9	1	18	1,384	504	95	785
2	Katra Colonelganj	20	4	..	16	..	..	..	..	18	..	..	18	1,593	498	205	890
3	North kotwali ward	..	..	..	..	20	1	..	19	..	..	..	..	1,139	409	92	638
4	South kotwali ..	..	..	..	..	3	..	..	3	..	..	..	..	778	185	50	548
5	Moothiganj ..	11	6	..	5	2	2	..	..	..	..	..	..	620	111	102	407
	Kydganj ..																
6	Daraganj ..	61	13	9	34	..	..	..	..	..	..	..	..	550	168	46	341
7	East Indian Railway settlement.	..	..	..	..	..	..	..	..	..	..	..	..	250	82	8	160
CAWNPORE																	
1	Civil Lines ..	48	9	..	39	13	6	..	7	27	9	..	18	906	304	71	531
2	Patkapur ..	13	..	..	13	1	1	..	..	2	2	..	..	695	261	7	427
3	Moolganj ..	49	32	..	17	14	7	..	7	7	3	..	4	1,185	599	108	478
4	Nayaganj ..	46	..	..	16	..	..	..	..	..	..	..	..	315	139	4	172
5	Sadar Bazar ..	15	4	..	11	..	..	..	..	..	..	..	..	659	308	22	320
6	Collectorganj ..	56	32	..	24	1	1	..	..	6	..	..	6	531	172	34	325
7	Anwarganj ..	28	1	..	27	56	29	..	27	23	11	..	12	1,424	455	265	704
8	East Indian Railway settlement	4	4	..	..	..	..	..	..	6	1	..	5	140	54	9	77
LUCKNOW																	
1	Daulatganj ..	8	..	2	6	..	..	..	..	..	..	..	..	695	325	46	322
2	Sa'adatganj ..	4	..	..	4	..	..	..	..	..	..	..	..	370	152	36	182
3	Chauk ..	14	8	..	11	..	..	..	..	..	..	..	..	571	252	60	259
4	Yahiaganj ..	17	6	..	11	..	..	..	..	..	..	..	..	1,160	357	161	582
5	Wasirganj ..	80	28	..	52	..	..	..	..	14	9	..	5	1,291	407	182	759
6	Ganesbaganj ..	31	20	..	11	..	..	..	..	4	..	..	4	915	264	142	507
7	Hasraiganj ..	35	16	..	19	19	11	..	8	33	5	..	28	1,198	502	213	483
8	Hassanganj ..	193	116	..	19	15	15	..	..	33	21	..	12	732	282	44	405
9	Railway settlement	5	..	..	5	..	..	..	..	4	..	..	4	294	100	41	68

TIONAL TABLES.

Transport by air.				Transport by water.				Transport by road.				Transport by rail.				Post Office, Telegraph and Telephone services.				Serial number.
Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	
95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	1
MUNICIPALITY.																				
..	58	15	..	43	732	377	..	355	487	151	10	323	165	56	14	95	1
..	1,016	498	..	518	788	244	0	538	147	51	..	96	2
..	613	189	..	474	2,966	1,128	6	1,832	278	89	1	188	3
..	1,562	604	..	958	1,372	225	1	1,146	375	124	..	249	4
..	883	371	8	504	824	217	1	606	112	40	1	71	5
..	557	275	..	282	236	115	..	121	45	12	..	21	6
..	95	55	1	39	943	307	5	631	91	37	..	54	7
MUNICIPALITY.																				
..	2	1	..	1	841	382	..	459	909	587	..	322	39	24	..	15	1
..	24	3	..	21	914	250	..	604	1,225	511	1	713	202	46	..	156	2
..	1,041	487	..	554	343	192	..	151	14	4	..	10	3
..	239	62	9	168	105	46	..	59	11	7	..	..	4
..	772	329	..	443	1,139	526	..	613	39	14	..	25	5
..	1,582	660	..	922	2,334	1,109	105	1,120	51	25	..	26	6
..	2,606	1,109	11	1,486	1,956	776	..	1,180	330	136	..	194	7
..	1,036	533	3	500	6	1	4	1	8
MUNICIPALITY.																				
..	936	408	..	468	564	195	0	363	244	117	..	127	1
..	488	305	..	188	488	83	..	405	284	124	..	160	2
..	525	278	..	247	491	102	..	389	47	20	..	27	3
..	911	503	4	404	1,305	455	..	850	116	73	..	43	4
..	951	326	10	615	3,941	1,691	2	2,248	329	137	..	192	5
..	1,391	696	49	946	3,089	1,288	5	1,793	716	346	..	370	6
..	1,228	634	5	589	2,513	939	9	1,565	411	168	4	239	7
..	191	88	..	103	334	66	..	268	45	..	..	43	8
..	45	31	..	14	597	185	..	462	28	18	..	10	9

TIONAL TABLES.

Trade in metal.				Trade in pottery, bricks, and tiles.				Trade in chemical products.				Hotels, cafés, restaurants, etc.				Other trade in food stuffs.				Trade in clothing and toilet articles.				Serial number.
Total.	Male.	Female.	Dependents.	Total.	Male.	Female.	Dependents.	Total.	Male.	Female.	Dependents.	Total.	Male.	Female.	Dependents.	Total.	Male.	Female.	Dependents.	Total.	Male.	Female.	Dependents.	
185	186	187	188	189	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	1
MUNICIPALITY.																								
..	7	2	..	5	7	2	2	3	825	220	111	494	30	13	..	17	1
..	78	27	..	51	1,907	601	147	1,159	10	10	..	..	2
..	38	27	..	11	4,382	1,392	516	2,474	15	11	..	4	3
..	76	16	..	60	4,674	1,617	460	2,597	58	1	..	57	4
..	9	5	..	4	2,928	879	224	1,835	10	3	..	7	5
..	16	..	..	16	2,316	638	388	1,290	15	..	..	15	6
..	21	18	..	3	691	353	76	262	2	..	..	2	7
MUNICIPALITY.																								
..	58	34	..	24	19	15	..	4	2,342	802	154	1,820	44	15	2	27	1
..	9	..	..	9	43	1	..	32	2,565	785	215	1,565	30	7	..	23	2
..	58	25	..	33	2,364	880	263	1,281	67	26	..	41	3
..	4	3	..	1	2	..	..	2	1,460	708	79	673	13	9	..	4	4
..	2	..	..	2	3	1	..	2	2,394	941	197	1,566	33	17	..	16	5
27	27	..	..	..	..	..	..	..	..	12	7	..	5	5,825	1,421	332	2,132	35	4	..	29	6
..	85	53	..	30	4,617	2,017	500	2,100	22	16	..	6	7
..	473	309	15	149	..	..	..	..	8
MUNICIPALITY.																								
..	3	..	..	3	9	4	..	5	1,520	692	143	685	28	12	..	16	1
..	18	13	..	5	85	51	..	32	1,225	392	159	674	197	92	..	105	2
..	10	5	..	5	57	15	1	41	1,356	410	161	785	84	26	..	58	5
..	58	70	..	38	2,887	1,225	570	1,092	23	11	..	12	4
..	15	6	..	9	61	8	..	53	5,975	1,660	264	2,051	17	10	..	7	5
..	12	..	..	12	4	2	..	2	2,743	1,123	277	1,343	21	7	..	14	6
..	2,001	705	222	1,074	4	2	..	2	7
..	2	..	..	2	14	..	..	14	1,648	609	316	723	29	13	..	16	8
..	202	110	11	81	6	2	..	4	9

MUNICIPAL OCCUPA

[illegible]

Trade in articles of luxury and those pertaining to letters and the arts and sciences.				Dealers in rags, stubble, refuse, etc. shop-keepers otherwise unspecified itinerant traders, pedlars, other traders, etc.				Army.				Navy.				Air Force.				Serial number.
Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	
175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	1
MUNICIPALITY.																				
21	6	1	15	97	40	2	55	148	22	7	119	1
10	4	..	6	116	29	..	87	13	..	1	12	2
85	12	22	51	144	23	4	117	92	63	..	29	3
79	12	8	58	130	1	11	118	445	155	..	290	4
10	..	2	8	43	25	..	18	198	49	..	149	5
24	16	146	31	25	90	71	71	6
3	3	3	3	90	70	..	20	7
MUNICIPALITY.																				
47	27	..	30	140	47	1	92	139	90	1	48	1
41	28	..	13	231	117	1	113	115	60	..	55	2
54	18	4	80	553	222	..	331	5	5	3
4	..	4	..	13	4	..	10	24
42	5	20	17	47	1	6	40	39	23	..	16	5
14	14	61	18	2	41	12	6	..	6	6
16	4	1	11	203	57	..	146	109	65	..	44	7
4	4	4	2	..	2	20	12	..	8	8
MUNICIPALITY.																				
12	3	..	9	48	21	..	27	35	11	..	24	1
85	52	4	27	70	32	..	38	9	8	..	1	2
28	11	..	15	..	6	3	46	65	14	..	51	3
31	14	..	17	28	17	..	11	278	137	..	141	4
39	2	..	87	296	94	6	196	217	89	..	128	5
..	14	5	..	9	717	304	..	358	6
6	6	16	11	..	5	381	284	..	147	7
..	20	18	..	2	184	89	..	95	8
..	21	21	253	161	..	92	9

MUNICIPAL OCCUPATIONAL TABLES.

Serial number.	Name of ward.	Police.				Public administration.				Religion.				Law.			
		Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.
1	2	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
ALLAHABAD																	
1	Civil Lines ..	668	342	..	326	944	327	..	617	304	59	..	242	317	72	..	245
2	Katra-Colonelganj	587	233	..	254	1,654	633	4	1,017	423	83	11	329	619	182	..	437
3	North Kotwali ward	393	174	..	219	1,137	374	..	763	498	79	12	407	1,101	393	8	705
4	South Kotwali ..	441	209	..	232	543	203	..	280	842	298	37	507	380	165	..	215
5	Moothiganj ..	336	108	..	218	558	199	..	359	544	237	3	304	250	48	..	202
	Kydganj ..																
6	Daraganj ..	207	109	..	98	131	59	..	72	460	183	47	230	189	65	..	124
7	East Indian Rail- way settlement.	176	102	..	74	122	64	..	58	97	67	3	27	96	40	..	56
CAWNPORE																	
1	Civil Lines ..	400	260	..	140	457	261	..	193	744	142	31	571	336	62	5	269
2	Patkapur ..	198	132	..	66	304	100	1	203	1,114	216	21	877	442	83	3	356
3	Moolganj ..	104	60	..	44	286	125	..	161	937	249	31	677	221	142	..	279
4	Nayaganj ..	116	49	..	67	60	33	..	27	807	261	4	542	41	25	..	10
5	Sadar Bazar ..	106	30	..	76	158	58	..	106	695	206	..	480	23	10	..	13
6	Collectorganj ..	322	150	..	172	354	141	1	212	736	135	4	597	86	28	..	58
7	Anwarganj ..	383	164	..	219	950	349	..	601	730	132	9	589	1,338	661	4	678
8	East Indian Rail- way settlement.	93	40	..	47	35	26	..	9	182	33	1	148	11	5	..	6
LUCKNOW																	
1	Daulatganj ..	239	168	..	91	445	161	..	284	225	101	16	108	351	158	..	193
2	Sa'adatganj ..	189	125	..	64	441	170	..	271	367	197	4	186	226	62	..	164
3	Chauk ..	185	79	..	103	321	129	5	187	304	112	61	131	278	48	2	226
4	Yahiaganj ..	139	96	..	43	1,357	440	16	901	537	169	14	354	681	224	..	457
5	Wasirganj ..	383	140	..	243	1,695	768	9	1,118	372	87	4	281	1,547	621	1	925
6	Ganeshganj ..	244	110	..	134	791	349	14	431	123	51	2	75	512	285	..	224
7	Hasratganj ..	337	196	..	191	332	189	..	143	99	26	5	68	272	88	..	184
8	Hassanganj ..	297	151	..	146	527	343	..	184	293	5	19	269	39	10	..	29
9	Railway settlement	40	22	..	18	106	79	..	27	25	4	1	20	145	79	..	60

Medicine.				Instruction.				Letters, arts and sciences.				Persons living principally on their income.				Domestic service.				Serial number.
Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	
211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	1
MUNICIPALITY.																				
84	26	14	44	295	89	42	164	63	15	..	48	238	58	44	186	3,600	1,684	416	1,500	1
428	120	16	284	676	272	21	383	249	75	..	174	339	64	28	247	2,123	758	399	966	2
409	99	15	295	797	235	7	555	309	120	5	184	358	74	31	253	2,700	1,108	653	939	9
572	214	..	358	284	105	2	177	44	17	..	27	251	54	6	191	4,549	1,772	617	2,160	4
176	23	..	153	270	110	4	156	57	14	..	43	82	13	5	64	3,503	1,381	045	1,477	5
51	20	..	31	84	34	..	50	21	5	..	16	63	21	..	42	1,120	426	187	507	6
55	16	..	27	8	2	..	6	1	..	..	1	6	..	1	5	434	173	49	212	7
MUNICIPALITY.																				
111	44	4	63	219	65	20	128	76	41	4	31	133	46	16	71	5,373	3,021	53	2,299	1
370	170	..	200	282	122	2	158	148	43	33	72	288	72	25	191	2,439	1,030	247	1,102	2
02	133	..	109	149	55	1	93	288	89	95	101	187	89	3	95	2,091	725	408	958	3
101	36	13	52	81	30	..	46	5	..	..	6	3	..	1	2	929	437	150	342	4
119	25	5	89	147	41	7	99	6	..	..	6	9	..	..	9	1,413	479	215	719	5
155	28	9	118	199	64	1	134	48	19	12	17	156	29	31	96	2,326	1,071	348	907	6
395	121	4	270	468	111	10	347	105	17	..	58	295	10	114	171	3,572	1,830	403	1,839	7
25	8	..	17	43	19	4	20	18	13	..	5	6	2	1	3	274	162	23	89	8
MUNICIPALITY.																				
283	85	..	178	260	103	7	150	8	4	..	4	2,036	488	134	1,414	1,101	526	160	415	1
132	52	..	80	155	50	..	108	29	8	..	21	1,300	318	186	606	1,275	497	161	617	2
276	108	10	158	323	98	2	225	170	82	..	88	445	139	29	277	1,981	659	214	1,108	3
163	58	..	130	279	78	7	194	38	20	..	18	587	210	86	341	2,250	654	404	1,192	4
687	221	..	466	756	267	7	482	89	40	..	19	936	176	116	644	4,229	1,585	912	1,732	5
156	72	4	80	543	282	3	263	164	13	..	151	334	16	18	300	3,759	1,489	146	2,154	6
232	68	3	161	223	92	14	122	110	22	..	88	288	67	28	193	2,934	857	99	1,978	7
22	2	..	20	46	9	2	88	12	4	..	8	47	22	..	25	1,216	570	100	546	8
187	90	..	67	62	32	..	30	13	3	..	10	69	33	2	34	642	298	24	320	9

MUNICIPAL OCCUPATIONAL TABLES.

Serial number.	Name of ward.	Manufacturers, businessmen, contractors, cashiers, accountants etc., mechanics, clerks, lawyers, workmen, otherwise unspecified.				Inmates of jails, asylums and almshouses.				Beggars, vagrants and prostitutes.				Other unclassified non-productive industries.			
		Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.	Total.	Males.	Females.	Dependents.
1	2	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246
ALLAHABAD MUNICIPALITY.																	
1	Civil Lines ..	2,634	1,068	441	1,135	4	..	..	4	83	11	11	61	..	..	..	..
2	Katra-Colonelganj	2,595	1,154	486	955	..	..	..	..	223	67	36	120	..	..	..	..
8	North Kotwali ward	4,907	1,761	877	2,269	342	342	..	..	599	218	168	273	..	..	..	..
4	South Kotwali ..	6,984	2,253	1,861	2,870	..	..	..	..	1,153	454	214	485	..	..	..	..
5	Moothiganj ..	3,207	1,051	696	1,460	..	..	..	..	612	212	102	198	..	..	..	..
	Kydganj ..																
6	Daraganj ..	1,373	461	332	585	..	..	..	..	354	52	101	198	..	..	..	..
7	East Indian Railway settlement.	523	260	14	219	..	..	..	..	191	98	78	75	..	..	..	..
CAWNPORE MUNICIPALITY.																	
1	Civil Lines ..	5,962	2,192	31	3,739	..	..	..	..	1,811	1,144	181	486	..	..	..	..
2	Patkapur ..	3,083	1,370	193	1,522	..	..	..	..	430	106	100	224	..	..	..	..
3	Moolganj ..	2,969	1,049	289	1,631	..	..	..	..	300	103	29	168	..	..	..	..
4	Nayaganj ..	5,370	2,785	261	2,324	..	..	..	..	150	73	94	54	..	..	..	..
5	Sadar Bazar ..	7,615	3,571	968	3,076	..	..	..	..	184	85	65	34	..	..	..	..
6	Collectorganj ..	12,640	4,762	876	7,002	..	..	..	..	319	241	18	66	..	..	..	..
7	Anwarganj ..	2,787	5,955	1,245	5,687	..	..	..	..	615	204	114	297	..	..	..	..
8	East Indian Railway settlement.	393	167	69	157	..	..	..	..	91	17	35	39	..	..	..	..
LUCKNOW MUNICIPALITY.																	
1	Daulatganj ..	8,323	2,815	1,003	4,495	..	..	..	..	463	192	58	233	..	..	..	..
2	Sa'adatganj ..	5,909	1,999	1,337	2,573	..	..	..	..	234	111	40	83	..	..	..	..
3	Chauk ..	5,653	2,272	297	3,144	..	..	..	..	423	70	156	197	..	..	..	..
4	Yahiaganj ..	13,537	5,869	2,112	5,556	..	..	..	..	694	236	144	312	..	..	..	..
5	Wazirganj ..	9,790	2,933	769	6,098	..	..	..	..	356	97	168	91	..	..	..	..
6	Ganeshganj ..	10,808	4,980	494	5,334	..	..	..	..	161	36	19	126	..	..	..	..
7	Hazratganj ..	8,114	3,158	655	4,301	..	..	..	..	210	100	41	69	..	..	..	..
8	Hasanganj ..	5,461	2,359	491	2,601	..	..	..	..	372	203	80	89	..	..	..	..
9	Railway settlement	374	217	9	148	..	..	..	..	..	..	..	..	..	..	..	..

